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This handbook, based on an integrated linguistic analysis of the English language, was designed to provide high school students with a greater insight into the structures and patterns of English. (See related document AL 001 320 for a description of the Buffalo English Linguistics Project.) The seven units of Volume I, which are intended to cover the first semester of the school year, treat the following areas--(1) the general concepts of linguistics and culture, and the scientific approach to their study, (2) the development of language, English and its dialects, English as a world language, and the study of English, (3) English phonology, based on an aspectual analysis, (4) paralanguage and kinesics, (5) oral communication, (6) morphophonics, and (7) morphemics. A general pre-test, included in the student's preface, tests the student's knowledge of English as it is traditionally presented in the areas of spelling, puctuation, parts of speech, and sentence parts. Further tests and quizzes are included in all the units. This volume is followed by Volume Two for the second semester (see AL 001 319). (AMM)

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A LINGUISTIC APPROACH TO ENGLISH

Revised Edition

VOLUME ONE

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
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A LINGUISTIC APPROACH TO ENGLISH

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VOLUME ONE

August 1964

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BUFFALO ENGLISH LINGUISTICS PROJECT

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PREFACE TO THE STUDENT

This book has been prepared to help you understand and use your language, English, effectively in both oral and written forms. It is part of a new experiment in English language learning never attempted before. When you have finished this course, you will be able to say with pride that you know more about your language, on all levels, than any class anywhere. We hope that this will be challenge enough in itself to keep you going!

Though the book is in many ways similar to other high school and college English texts, it also has many elements which are not found elsewhere. The major difference is that the analysis you will learn is based on a linguistic analysis of English according to principles developed over many years by Drs. George L. Trager and Henry Lee Smith, Jr., of the Department of Anthropology and Linguistics at the State University of New York at Buffalo. This analysis takes many more factors into consideration than do the more traditional treatments of English grammar. Though the thoroughness of our presentation may at times seem confusing -- both because there is more to learn and because much of what is presented is entirely new to you -- we think that you will be rewarded by a greater insight into the workings of your own language if you work carefully through this book than you would if you used a more traditional approach to the study of English.

This analysis of English is based on the scientific method -- upon the careful gathering of data from English speakers, rather than on a few guesses about the way our language "ought to be." The application of the scientific method to the analysis of language is a relatively new thing. It will give you new ideas about your language. From this point of view the subject matter should be more interesting and challenging to you than you might think possible.

In order to show you what progress you can make in the understanding and use of your own language, you will be asked to take a short test before you start your work in this volume. The test follows this Preface. It will cover the areas of spelling, punctuation, parts of speech, and sentence parts. It is designed to test your present knowledge of these elements of English as you have learned them in traditionally taught classes during your previous school years. After you finish the course in the spring, you will be asked to take another test on these same areas. If you have carefully studied the materials in the text, we can promise you that you will be pleasantly surprised by your increased knowledge of the fine points of English. In addition there are numerous exercises in all the units. Some of these, called Quizzes, you will be asked to complete and turn in to your teacher as part of your English grade. Any exercise with space provided for your name, school, grade, and teacher is a Quiz and should be done either in class or as homework and turned in to your teacher.

This volume is the first part of the course. You will use it during the first semester of the school year. A second volume, for the second semester, will be given to you later. In both volumes you will find a list of all new terms discussed in the units. These lists are given at the end of each volume.

The pages of each of the fifteen units have been numbered separately, with a Roman numeral before the page number to indicate the unit. Thus II-17 means Unit II, page 17.

You will study the units of Volume One according to the following month by month schedule, in addition to your other work in English literature. Your teacher may make some modifications in this schedule.

October -- Units I and II
November -- Units III, IV, and V
December -- Units VI and VII
January -- Unit VIII

We hope that you will enjoy this experiment in language learning and that you will find it has helped to give you new insights into how your language works amd how to use it with the most effective results.

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PART I

THE SETTING OF ENGLISH

UNIT ONE

THE SETTING OF LANGUAGE

1.0. Linguistics. In this unit you will begin your new approach to the study of your native language, English. You will study your language as a science. The meaning of the scientific method will be discussed thoroughly later in this unit, but it is important for you to understand, right at the beginning, that the approach to the study of English will be different from what you have previously encountered. You will not study the way in which some one thinks English should function; you will be concerned with a thorough description of the way English actually does function. You will be studying the structures of your language and their patterns of interaction. Eventually this will lead you to reconsider such problems as whether you should say ain't, whether you should say "It's I" or "It's me", and other questions of style. But you will have a new perspective for discussing these problems, and, hopefully, for reaching desirable conclusions.

You might ask, "Why should I study about the structures of English? I'm not going to be a specialist in English; all I will need is to be able to speak, read and write it."

Analyzing the sounds and the grammatical systems of English is done for three purposes. First of all, as educated members of a community, all students should learn something about the basic sounds and patterns of at least their native language. This should be a part of your general education, and it should need no further justification. Just as all students learn something about the structure of animals and plants in biology, with its various branches, they should also know something about the structure of their language.

Language, as the first and greatest of the human inventions, made all of man's subsequent inventions and progress possible. Even the signs and formulas of science and mathematics are not merely separate symbols that function apart from language; they come from men who can deliberately make certain symbols for certain things, just as in language we have sounds and sound combinations called words stand for certain things. "A rose is a rose is a rose," regardless of what we call it in whatever language. Water would remain water even if we changed the names of the elements that make it up. And distance is relative, whether you use the American system or the far more widespread metric system. Too, every single mathematical or scientific

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formula has to be read to make any sense of it. It has to be understood. And the logical system is a derivative of language patterns, as our examples have shown.

Most of you will know that mathematics is based on what is called the logical system. There are two kinds of logic, deductive and inductive. Deductive logic spells out the bases of mathematical systems; and inductive logic, often using deductive logic as a tool, is the basic procedure of scientific method which apply to any natural science, whether it is biology, chemistry, physics, anthropology, linguistics or any other. BUT the basic principles of both logical systems are found in the grammatical structure, that is, the cause-effect sentence pattern of our language. This is the most basic system of all. To see this relationship in detail, you would have to study symbolic logic, a subject that you can't pursue until you are an advanced student in college. Once you do study symbolic logic, the relationship to our language patterns will become very apparent to you. However, you do not have to become so sophisticated, intellectually, to begin to see the relationship at least partially. As you progress from the study of sounds to the study of the grammar of English, something of this relationship will become apparent. The system of grammatical analysis you will learn in this class will give you formulas for all the basic kinds of sentences possible in English. These formulas should make it possible for you to see the relationship between the derived mathematical system that you study in algebra and geometry and the parent system, the language. Later in this unit you will study in more detail how language colors your view of the world and what recent scientific speculations hold about the invention of language.

All this is part of the first reason why you should study the basic structure of your language. It is an important part of the general knowledge of the nature of the world that you should know if you want to consider yourself a modern, educated human being. The other two reasons for studying the sound and the grammatical systems of our language are practical, as you will see later in this course. If you know the truth instead of the myths about the sounds of your language, it should help you understand the system of spelling we use. Unfortunately, English does not use one letter for each sound. If that were true, spelling would be a simple task, in one regard; but the people of each dialect area would spell differently. If each letter did represent one sound, you could learn the equivalents, and spelling would then be completely automatic. You must not expect such easy one-to-one correspondence. You can, however, know more about the sounds of the language than you now know and make more sense out of spelling rules than is presently possible for you. In fact, we are going to present some revised rules of spelling that should be a practical aid for the rest of your writing days. Those of you who have spelling problems will probably find practical help in these rules; those of you who spell quite well will at least grow to understand the spelling system better. First, however, we must teach you something about the sounds themselves.

Still another reason for studying the sounds of English is that the knowledge can also aid you practically in punctuation. Long ago you learned that if you say a word such as "now" and let your voice drop down, it can be taken as a command to do something now; but if you raise your voice at the end of "now", it becomes a question. This is only one feature of what we call English intonation. Another feature of intonation, with which you may be acquainted, is stress; or perhaps you know it as accent. You are probably familiar with a general rule in English that words which may be either nouns or verbs will, if they are nouns, have the accent on the first syllable (pŕotest), and if they are verbs, on the second syllable (protést). We will study all of the intonation features of our language scientifically, and the knowledge should help make sense out of punctuation rules such as those for the placement of a comma.

Knowledge of the grammatical structure of our language will have the practical benefit of helping you to understand correct usage problems. You will be given a system by which you can write formulas for all of the basic sentence types in English, and, indeed, you will be able to write a formula for any utterance. This is an interesting achievement in its own right, but it will also have the practical value of being a short-hand through which you and your teacher can discuss your, or anyone else's, writing. Instead of merely telling you that a sentence is ambiguous or awkward, your teacher will be able to pinpoint, quite succinctly, exactly what it should be and why.

A final reason for studying English structure, a sort of subsidiary bonus or residual benefit, should come to those of you who are or who will be studying foreign languages, because any comparison of it and your own will improve your understanding of both.

1.1. The Concept of Culture. The word culture, as it is popularly used, has several definitions. No doubt you have heard someone described as a cultured person. What is usually meant by such an expression is that a person is well acquainted with good music, is well read, understands art, and has a well-developed sense of manners. You may also have heard the term used in a different sense, as when we speak of the culture of the Polynesian groups of the South Pacific isles. Culture is here used anthropologically, that is, it refers to the religious-beliefs, language, social systems, values, and morals of a group of people the total ways in which a particular group of people-act and inter-act. This is the sense in which we will use the term *culture*. We define the field of anthropology as the scientific study of man. The four sub-fields of anthropology are *ethnology*, the study of the culture of any group of people (most frequently *primitive* groups, but the techniques may be applied to any group); *archaeology*, the study of past cultures, as made possible through physical remains of such groups; *physical anthropology*, the study of human biological evolution; and *linguistics*, the study of the language of a particular group of people. It is in this context that we will approach our study of language, and it is for this reason that we need to have some idea of the anthropological use of the term *culture*.

In the anthropologist's view, the two basic things that distinguish man from the other animals are culture and language, with the two inescapably interwoven. Most of our systems of beliefs and behavior are transmitted through language, so language becomes the focal point of culture. Another way of viewing culture is to view it as communication, a way of seeing the world, reacting to it and communicating about it. Let us take some concrete examples of these somewhat abstract concepts. The way a man dresses *in* our culture is prescribed *by* our culture. It is determined that in western society men wear trousers and women wear dresses. Men have their hair cut short and women wear it long. Of course you are probably already reacting that in many situations these days women, or girls wear slacks almost as frequently as men; and women are cutting their hair much shorter, while boys are letting theirs grow longer. It is not an exaggeration to say that among some teenagers of today it is sometimes difficult to distinguish the male from the female by dress and hair style alone, for they are frequently, for informal situations, exactly the same. But the general distinction of male and female apparel is still prescribed and very distinct. There are other societies, of course, which make entirely different kinds of prescriptions for male and female dress. Can you think of groups where males wear something like a dress?

The way a particular man dresses, on any occasion, immediately gives us a certain amount of information about him. To use the most obvious examples, if we see a man wearing a high-necked white coat, we immediately know that he is probably a doctor, a pharmacist, or a barber. But we make much finer distinctions than this about clothes. Most of us are able to judge the approximate cost of a suit of clothes by the richness of the fabric, the quality of the tailoring, etc. Even though we might not be able to list the details of what makes a suit of clothes appear expensive, we react to the total picture. And the relative price range of a suit of clothes tells us something about the man; we have a communication even though no word is spoken. If the clothes are expensive and he is wearing them in an every day business situation, we know that his work is the kind that will not dirty his clothes, that his financial status is good, and, probably, that his education is better than average. But we can be even more discriminating. If we see a man walking a downtown street on a week day lunch hour wearing a tweed jacket, flannel slacks, and a button-down shirt, we may reasonably infer that he is probably a college professor, a lawyer, or a doctor. The chances are reasonably good that he is college educated. But if on the same street at the same time we see a man wearing a plaid business suit, a white-on-white shirt (obviously no button-down collar), we may quite reasonably infer that he is a salesman. A few subtle changes may change the occupation. If a man is wearing an extremely conservative suit, usually dark with a conservative-cut white shirt, he is probably a business executive, possibly a banker. The make of car that he drives, and even its color will tell us things about his occupation, financial status, and possibly his ethnic background.

In other words, the culture is the agreed upon way of behaving for any group of people; but it is not necessarily, and not frequently, a conscious agreement. It is an unquestioned assumption. It is assumed to be the natural way of doing things. For example, we feel that it is natural to acquire goods and to want to acquire goods. The man who can afford the mansion and the limousine is automotically the important man in our culture. We feel that he must be important, or he wouldn't have those things. We view it as the natural order of things. But the Kwakuitl Indians of the Pacific northwest have a set of beliefs which is almost the opposite. They believe that it is natural to show your superiority by giving things away. The more that you can give to your friends and neighbors, the more important you are. We do have some of this trait in our culture, as when a person makes large contributions to charity, hospitals, colleges, foundations, etc., but basically we judge our status by what a man possesses. With the Kwakuitl Indians, obviously to give things away you must first possess them, but the mere possession gives a man no status whatsoever; it is only when he gives lavishly that he gains the status.

We must also realize that all human behavior is patterned: that some things fit together and others do not; that if we observe A and B, then we can also expect C; but if we observe D and E, then we will expect F. To return to our former example, if we saw the man with the white coat slide out from under a car in an automotive garage, we would be perplexed;

the world.

1.2. How Culture and Language Affect Our View of the World.

Two great American anthropolgists and linguists, Benjamin Lee Whorf and Edward Sapir, some years ago theorized about the way in which a language and a culture prescribe the view of a world that a particular people will have. Their ideas go under the name of the Sapir-Whorf hypothesis.

They were concerned with an analysis of patterns of behavior, mostly learned out-of-awareness, that dominate the actions and thought of the members of a particular culture. It can be compared somewhat to trying to view reality through a prism: you never actually see reality; you always see it with a particular and consistent kind of distortion. This is what the language and culture do to you and the way you look at the world, even though you are not conscious of it and even though you may think that this is the way the world really is.

Again, let us take some concrete examples. We think of the distance that we maintain in conversation as natural, something everyone agrees upon. This is true; everybody in our culture maintains about the same distance when they are standing around in conversation. This distance is approximately at arm's length. Of course there are exceptions for special occasions, as when a football team huddles, but for general conversational purposes the distance is quite uniformly maintained. If you travel to Latin America, however, you will find that the normal social distance is approximately half as much as we maintain. If you find an American or a Canadian talking with a Latin American, you will find that the Latin American is continually stepping forward, trying to get close enough to feel that he can talk without shouting, and the American or Canadian is continually stepping back, because he feels that the Latin American is too close, he feels that he is being pressed upon. It is quite comical to observe such a situation, because at a party, for instance, the Latin American may chase the North American all around a room during the course of an evening. By contrast, the British social distance is greater than ours; therefore, the Britisher tends to feel that the American is "pushy", that he himself is always being crowded by the American.

These kinds of things have become a necessary part of the training of our foreign service personnel in the State Department, because if an ambassador or foreign service officer is sent to a country without some prior training in its cultural ways, he may well give unintentional offense to the governmental officials of that country as he meets and converses with them on social occasions. The diplomat must be trained to accommodate himself to the patterns of the country where he is going. The American State Department has actually received complaints from some Latin American countries that "you say that you want to be friendly but you always keep us at arms length". This complaint, quite unconsciously, pin-pointed a cultural difference. For the same reason, the foreign service officer who will go to England must be prepared for the British patterns, so that the British will not interpret his behavior as being "pushy" when he is in reality only trying to be friendly.

If you are not convinced that we naturally (we have been trained culturally to feel this way) feel so strongly about social distance, a few situations you can watch should make you conscious of it. In your normal classes you occupy every seat and you tend to associate with students you know. On the next occasion you find yourself in a group with students you do not know, and where there are many more seats than people, notice how many of you will sit in alternating seats, keeping the strangers at some distance. Of course, you will find people clustering, either because there are some who knew one another previously, or because they have already struck up an acquaintance while waiting for activities to begin. Notice that those people who have not already begun to interact socially will try to keep an empty seat between themselves and the stranger.

Cultural patterning would lead us to expect that the Latin Americans maintain closer physical contact in other situations also, and this we find to be true. For instance, three adult males in our culture, travelling together in an automobile, would arrange themselves with two men in front and one in back, especially if it were a compact car with a narrow seat. By contrast, three adult Latin American males would all sit in the front seat, even in a compact car. In automotive seating arrangements, three American men would almost never sit with two men in the back and one in the front. Such an arrangement would imply social superiority of the men in the back seat, seemingly relegating the driver to a chauffeur status.

An example of a cultural prejudice built right into the language is the tremendous time-consciousness of western society. We cannot make a statement without indicating that the action talked about happened in the past, is happening now, or will happen in the future. Every verb must give this indication of tense, a fact generally true of all European languages. But it is not true of languages of cultures radically different from ours. Many such languages do not have a time indicator built in as a necessary part of every statement. Consequently, as we would expect, these societies are not as time-bound as ours.

We even quantify time - we say "I'll give you five minutes", as if it were something we could draw out of the bank and hand to someone. It's a status symbol in our society to have a tremendously accurate watch.

As we indicated, many cultures do not have such a preoccupation with time. In fact, some peoples feel that we have a deep neurotic obsession about time. In American schools near an Indian reservation, where many Indians are integrated into the school system, there is often difficulty because the Indian students sometimes do not grasp the emphasis that general American society puts on time and punctuality. American teachers, on the other hand, do not understand that the Indian concept of time is different from theirs, so they tend to regard the behavior of the Indian students as immoral: they cannot seem to grasp that anyone would not naturally be as obsessed with time as they are. This is an excellent example of cultural misunderstanding, where one group of people refuses to look at another group as behaving differently because they view the world, and what is important to them in the world, differently. Everything in our culture re-inforces our preoccupation with time; therefore, we cannot grasp that this could be unimportant to other peoples. Our deepest moral values are concerned with the matter of being punctual, because acting and interacting in our society is dependent on time consciousness; we have structured it so. Remember, again, that our structuring of time was not a conscious decision; no panel of experts decided it should be so; it just developed that way out of our conscious awareness, and it must have developed very early, for it is reflected in our language from its earliest records.

The way in which we choose to look at the physical world is entirely prescribed by both our language and our cultural beliefs. The color spectrum, in the physical sense, is not broken into distinct and separate colors; it is, rather, a continuum, and colors fade one into the other with absolutely no line of demarcation. The fact that we fasten on certain colors we consider basic is entirely prescribed by our culture and by our language through the invention of color terms. By way of cultural contrast, the Taos Indians of New Mexico have one term that covers a considerable part of the color spectrum. In their color terminology the color of the sky and the color of the grass is the same, because this is the way that they have chosen, again unconsciously, to divide up the universe of colors. A speaker of English will ask a Taos speaker, "Can't you see the difference between the color of the grass and the color of the sky?" There is no difference in physiology; the Taos are not color-blind. They regard the difference in the color of the sky and the color of grass as two shades of the same basic color. In other words, they view the same physical reality, but they place the important dividing points differently.

We may even use an example from within our own culture in regard to color. By this time, most of you must be aware that there are different sub-cultures for the male and for the female in our society. Many words are used by men that are not used by women, and the reverse. For instance, girls will call each other dear or dearie. Boys usually will not. In regard to the color spectrum, the male is not supposed to be able to make all the color discriminations that a female does. Unless a male is an artist, or a decorator, or has some other professional excuse, he will not know the names for the different shades of color of the basic spectrum. Yet women are expected to know all of the terms that completely baffle males. For instance, one man cannot distinguish between turquoise and aqua, though he knows that one is supposed to be more blue and one more green ;he can see the difference, but he never seems to be able to remember which is supposed to be which.

The English language, and European languages in general, have a basic predisposition toward what we call the scientific method. This is true of all European languages. You are forced to think in terms of actor, action, result. Sentence structure forces you to regard one thing as causing another. Most of the Oriental languages, Chinese for example, would not say "The road is round". Instead, if you made a literal translation of the same sentence in Chinese structure, you would have to say something like "In regard to the road, roundness". We would say "He dropped the booked". A literal translation from Japanese would be, "In regard to the book, and in regard to him, the actor, there is a dropping."

Males in our culture are supposed to have a natural aptitude for mechanical things. But the Eskimos surpass us in a native understanding of mechanics. An Eskimo man, with no training in mechanics, can take apart an outboard engine that does not work, lay out the parts one after another, and with the most primitive tools, fashion a new part for a broken one, reassemble the engine, and it will work well, very often better than when it was originally assembled in a mass-production system. Why should Eskimos have such a predisposition toward things mechanical? No one can give a definitive answer, but some experiences of the American military in World War II suggest at least a partial cultural explanation. During World War II, the American military thought they had the answer to the problem of a good sled to go across the frozen Arctic regions. The first sleds were made of aluminum, and because of the roughness of the ice, they were completely useless; they were just banged to pieces. The Eskimos, in fashioning the runners of their sleds out of bone, would precisely fit together odd-shaped pieces, tying them tightly with cord. It appeared that the runner was made of one piece. In reality, the precision fitting and the tight-binding together provided the ideal runner, for it gave flexibility to go over rough ice, as well as a built-in shock absorption system providing a smooth ride. It is felt that there may be a correlation between this preoccupation with fine, mechanically precise fitting together of pieces of bone into a runner with the kind of insight that is necessary for understanding an engine, mechanically. In the theoretical sense, then, this would give the Eskimos a basic cultural predisposition for being able to accept mechanical things easily into their culture.

These have been only a few examples of the ways in which our language and our cultural beliefs prejudice our view of the world and prejudice our way of behaving, making us believe that we have the one correct way in which to react to the universal problems of human existence, that is the things which the human being must do in order to stay alive and perpetuate the species.

1.3. The Design Features of Language. There has been considerable discussion in the popular press, and on television recently about the ability of porpoises to cummunicate with each other, and their seeming high intelligence. Some individual's have even gone so far as to describe the communication system of the dolphin as a language. Another interesting incident, which received much publicity in the early days of the Kennedy administration, concerned the call system of birds. The communication systems going into the White House were being interfered with by an influx of a large number of sparrows perching on aerials, etc. Through study the call for danger used by sparrows in Baltimore, Maryland was discovered. Through playing a recording of this call it was possible to frighten away the birds. This seemed to be the solution for the White House sparrow problem. But when a recording of the call for danger was played to the White House sparrows, they did nothing, except to continue to enjoy their perch. From this incident it was claimed, and reported widely in the press, that even sparrows have dialects, and this is, in a sense, true. But to understand the difference between human language and the call systems of animals it is necessary to study the features of language which make it such an effective communication system. Knowledge of these will give a better appreciation of the greatness of the human invention of language. It will also give us a basis for some interesting speculations concerning how humans were actually able to invent a system so much more effective than that invented by any other animal, including the dolphin.

The analysis of the design features of language and other communication systems that we shall discuss was developed by the linguist Charles Hockett of Cornell. His article, The Origin of Speech, appeared in the September, 1960 issue of The Scientific American and some of you may want to look it up when you have finished with this unit.

The first of these design features is the vocal-auditory channel. It is a feature characteristic of language and also by some of the animal communication systems; for instance bird calls, which we discussed previously, and the calls of gibbons. Any animal that uses any sort of vocal signals and that is capable of hearing would possess this feature in their communication system. An inherent advantage of this system is that it leaves hands and other parts of the body free for other activities, such as carrying things.

Broadcast transmission and directional reception is a feature of language and of some animal communication systems. This feature applies to any system which broadcasts a message and requires a receiver, stationed so as to receive the message, but it would not necessarily require sound; the message could be a visual one. Again gibbon calls and bird calls would possess this feature, but it is also a feature in bee dancing. In every bee hive there is an imaginary axis. There is no mark, but the bees all know its exact location. When a bee has located a source of nectar, it returns to the hive and through its dance communicates the location of the source of nectar.

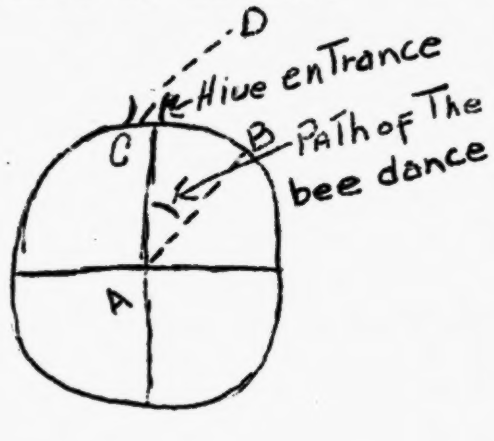


DIAGRAM 1.

Through their chemical sense the bees will know that a source of nectar has been found by the presence of pollen on the bee. The bee will then dance in an arc from the imaginary diameter of the hive. The angle of an imaginary radius, based on this arc, will be the communication telling the bees which direction to fly from the hive entrance. They will leave the hive on a path, C to D in diagram 1, which parallels this imaginary radius constructed from the arc of the bee's dance, A to B in our diagram. The speed of the bee's dance will communicate to the bees the approximate distance of the target from the hive. The communication system is not exact - the angle for the flight is not precise - but it is close enough so that the bees will be able to locate the source of nectar. Now this communication system, though it does not involve an auditory signal, does possess the design feature of broadcast transmission and directional reception, for the bees have to be able to observe the signal of the dancing bee.

The third design feature is rapid fading, or tansitoriness. We can easily see this in language because any spoken word, or even phrase, occupies an extremely brief time and then is gone, unless it is repeated by its sender. Bird or gibbon calls also possess this feature. In the case of a bee dance, it is somewhat questionable because though the bee does not dance forever, the transitoriness is not as short as with language or a vocal call; in other words the bees would not have to be so alert to perceive the message.

The next design feature is interchangeability. Any one who can speak can repeat a message that he has been given. This feature would also be possessed by the gibbon call system, but it is not present in all animal communication systems. For instance, the motions of the male and female stickleback fish are different as they perform their courtship ritual. The male fish can not even see the color of his own eye or belly, which are important in stimulating the female stickleback.

Total feedback, self-awareness of what one is communicating can be easily seen in language, in that everyone (except for a few exceptions) can hear what he is saying. Again, in the stickleback courtship ritual there is no feedback to the male that his eye and belly have assumed a certain color. This feature is not possessed in the bee dance, for the bee does not see himself acting out the arc, only the other bees are able to perceive his message. There are other ways in which humans communicate, besides language, that lack the last two features. We do for instance, communicate through facial expressions and bodily gestures (we will deal specifically with this kind of communication system in a later unit under the title of kinesics). But the expression on our face often communicates a considerable amount of information, and though we usually have some idea of what our expression is, we do not directly perceive it and might be surprised by it, if we happened to glimpse it in a mirror.

Specialization is an important design feature of language not possessed by some animal communication systems: no other practical purpose than communication is served by talking. Though in a strict chemical sense we do generate some physical heat as we talk, it is not of sufficient degree to be useful. In contrast, when a dog pants, and incidentally makes noise in his panting, he may in this way communicate his presence and the fact that he is hot to other animals or to humans. But his primary reason for panting is that it aids in alleviating his discomfort. He does not pant to communicate, the communication is incidental to his trying to improve his condition.

The same example is useful in illustrating the next design feature, that of semanticity. What we mean by this is that words have meaning, but the meaning is also purely arbitrary. It is an agreed upon convention that hand refers to our forepaw and foot to our hindpaw. But if we were accustomed to using these words in reverse, they would be just as meaningful.

There is no necessary connection between the nature of the vocal symbol and its meaning. But the panting of the dog is not symbolic of the fact that he is hot, it is actually physically a part of being hot. It is not an arbitrary symbol at all. The calls of birds and gibbons do have semanticity, however, because there is no necessary connection between the nature of the call and its meaning. It is true that the meaning of the gibbon calls is far less exact than the meaning of a particular word, but it does, nevertheless, have meaning. Again, the stickleback courtship ritual does not have semanticity, though bee dancing does.

The idea of semanticity is related to the next design feature, arbitrariness. As we pointed out above, there is no necessary connection between a word and what it means. Though bee dancing has meaning, which is not part of the dance itself, it is not arbitrary. The bee has to produce an angle which is the same as the angle that he wants the other bees to fly when they leave the hive. Another human communication system, painting, can be a useful example. Certainly a painting may have meaning, or semanticity; but it does not have arbitrariness. A picture of a barn looks like a barn, it does not look like a tree or a house. There is a built-in disadvantage to arbitrariness in that the meaning of the symbols has to be learned. However, arbitrariness has the advantage of making a system very expandable: think, for example, of the hundreds of thousands of words added to the English language as discoveries and inventions made new names necessary.

Discreteness is an important design feature of language. The two words, pit and bit, are alike in their pronunciation except for the initial sound. There is no in-between-point between the p and the b. If our pronunciation does not make clear which was intended, it does not result in a third utterance; it will be perceived by the hearer as either pit or bit or he will be confused. In language you cannot approximate; you must pronounce the necessary discrete features. The discrete features of each sound will be more apparent to you after you have studied the sound system of English. There is a system of vocal communications we shall also study later, called paralanguage, which is more or less continuous rather than discrete. If you want to raise the volume of your voice to show anger, you can do so on a continuing scale up to the total capacity of your vocal chords. There is no exact amount of volume which communicates a specified amount of anger. Gibbon calls, also, have discreteness. Certain parts of the call must always be present if the message is to be communicated, even though the gibbon may have some extraneous noise in the call. By way of contrast, the dance of the bee is not discrete, it is continuous. The bees have not measured the arc which they dance into degrees; they only approximate the angle.

One of the truly unique features of man's language, largely missing in animal communication systems, is that of displacement. Man can talk about things or events removed from him in time or space or both. The gibbon in his calls cannot say, "Food is coming", or "I had food yesterday;" he simply emits a call which means that food is present. The same is true for his danger call, or any other call he makes. Bee dancing, however, does have this feature of displacement, for a bee is, in effect, telling his associates that there is a source of nectar, out there, and he is symbolizing the direction and distance of it.

Another highly important and unique feature of language is productivity. We are not restricted to the eleven calls of the gibbon. All animals are drastically restricted in the messages they can communicate: and there is never any productivity; there is only the use of the small inventory of messages. Bee dancing, again, is productive in a special sense because whereas the gibbon will announce the presence of food, danger, or make a mating call, the bee determines the necessary angle of the flight and then sends the message. It might well be the first time that a particular message is being sent. This is not productivity in the same complex sense that human language possesses, but it is a form of productivity when compared to the call system of the gibbons. To return to the significant point, it is possible, through language, to combine parts of the patterns of language to make completely new statements, one that the individual speaking has never heard said to him. A unique feature of the kind of productivity inherent in language is that only through language can you make statements contrary to fact. While it is true that animals may, through gesturing, indicate a wrong direction, they do not make statements contrary to fact.

Language has the possibility of traditional transmission, that is it is used to label the artifacts and experiences of humans. We tell children that that is a foot, or a hand, or a house, or a teepee. The semanticity of gibbon calls almost seems to be carried in the genes, although no one can be sure. The fact that the gibbons, no matter where they are found in the world, have the same call for food, the same call for danger, etc. seems to argue that these are transmitted genetically. However, the example we started out with, that of the dialects of the sparrows, seems to indicate that in their case some kind of learning influences the semanticity of the calls. Though the inventory of calls is very limited, some sort of learning of their proper association seems to be required.

The final design feature we need to discuss is called duality of patterning, and it is, perhaps, the most abstract. It is highly important because no other communication system beside language, not even the other human communication systems such as paralanguage and kinesics, possesses it. We have a limited inventory of sounds in the English language - thirty-three, as you will later learn. But we have several hundred thousand words and most individuals have at least several thousand in their vocabularies. The few limited sounds of the language are combined and recombined to make up all these words. In the call system of the gibbons, the gibbon must utter the whole call, he cannot take a part of it and use it as a part of another call. Only language has this possibility. The sound p can combine with i and n in one way to make pin and if you change the arrangement of the same sound you make nip. Such procedure is what we mean by the duality of patterning: on the one hand, we have the sound system, the individual sounds of which never carry any meaning; on the other, we have the larger units, composed of combinations of these sounds, (in a general sense, words), which do carry meaning in our language.

This discussion of the design features of language has been provided to help you understand the unique nature of language, in contrast to other communication systems, and to provide a basis for some scientific guessing about how humans may have come to invent language, and with it culture and eventually the way of life we term civilization. As soon as we have language and culture, however, we already have a way of behaving which is distinctively human.

1.4. The Human Invention of Language. The process of the development of language from more primitive communication systems has been a subject for considerable speculation. Until fairly recently, there were no organized theories on the invention of language that brought together all pertinent modern knowledge. Any ideas on the subject were almost purely guesswork.

New studies by linguist Charles Hockett and archaeologist Robert Ascher of Cornell University provide a scientific basis for speculating on the invention of human language. Their hypothesis is a possible interpretation and a logical view of the few solid facts available in this area. Beginning students in archaeology are amazed at the kind of reconstruction of past civilizations that can be based on a relatively small number of remaining artifacts. Sometimes, as in the case of the pre-history (the time before written historical records) of Peruvian civilization, a pictographic history of a culture remains. That is, pictures drawn on such things as pottery are often so detailed as to give information about social classes and specialization of various social roles, occupational specialists, various kinds of technology, marital practices, and information about governmental structure, where it existed. Unfortunately, any language for which no writing has been invented cannot in any way be recaptured through any evidence remaining for the archaeologists. There is not even hope that any new discovery will give further information about the nature of a language spoken, but not written, at some time remote in history.

Anthropologists in general have conceded that language is the greatest of all human inventions, for it is language which truly distinguishes man from his closest relatives in the animal kingdom. Language is viewed as an invention because it was truly an innovation, the creation of something which had not previously existed. While it is true that animals have developed various communication systems, as you have seen, none of these even approach the complexity or efficiency of language. For instance, only human language can communicate about itself. It is possible to talk about talking. Anthropologists occasionally pun, "No other species can make that statement." In fact, no other species can make any statement.

Because the apes are the most closely related to the human animal, it is particularly interesting to study the kinds of communication systems they possess. The gibbons, as we mentioned, have a system of eleven discrete calls used for such common things in their experience as the announcement of the presence of food, danger, sex, etc. Though each of these calls is a complex acoustical event, the call must be repeated in its entirety for a communication to exist. No discrete units within the call are recognized by the gibbons as units, or even as parts of the call. Often it must happen that a gibbon comes upon a particularly tempting supply of food but also an equally great presence of danger. In his excitement, the gibbon may well issue a confusion or combination of the two discrete calls for food and danger. However, this is still reacted to as "noise"; that is, no communication takes place. If a gibbon were sufficiently self-possessed to issue first a call of food and then a call of danger, this would also create confusion, although if he repeated one call much more often than another, that would probably remain the primary communication. The point is that no matter how often a mixture or combination of these calls may be uttered, no new call representing any kind of union of the two calls has ever resulted. The system, therefore, remains closed and non-productive.

Hockett and Ascher have speculated how a combination of such calls might have resulted in the first opening of a closed system. A prerequisite of the opening of the closed communication system among the ancestors of human beings is based on what has been discovered concerning human evolution. The total size of the brain, and the number of convolutions, among the pre-human hominids and the early humans increased until about the time of Neanderthal and Cro-Magnon man, that is, somewhere around 50,000 years ago. At this point the development of the brain seems to have reached the stage of *complexity* where further development was neither necessary nor efficient, in an evolutionary genealogical sense, and since that time no appreciable change in the size of the human brain has developed. While there is no evidence indicating the size of the brain capacity necessary for the use of an *open* communication system in contrast to a *closed* call system, it is known that animals having brains the *size* of the *other primates*, never seemed to invent an open communication system. At some point, as the pre-human brain developed, it became adequate for understanding a more complex communication system. It is entirely possible, however, that language was invented *much earlier* than 50,000 years ago. The brain may have been sufficient to permit the invention of language as early as a half or three quarters of a million years ago, according to some recent speculations. It is reasonable to suppose that the pre-humans had call systems somewhat similar to the call systems used by the primates, such as that described above for gibbons, and these combinations of different calls finally grew to have meaning. The thesis may be restated this way: As the proto-hominds, man's ancestors, developed sufficient brain capacity, there came a time when the acoustical combination or blending of a call such as a call for danger, uttered in combination with a call for food, became a meaningful communication.

One possible occurrence of such a development could be diagrammed in the following way. A call for food is constituted by certain acoustical events, and these are comprehended by individuals in terms of their Gestalt, that is, they are understood only as a complete item. These calls can be described, in their acoustical complexity, by some such symbolization as ABCD. Another call, such as the one for danger, is represented by EFGH. This proto-human being, seeing the presence of a tempting supply of food and a frightening amount of danger, in his confusion might issue a call ABGH. Because the brain has developed sufficiently, this call may be understood and appreciated. Though the amount of productiveness in such a system is still extremely limited, it is an *open* system. As soon as this call is accepted, it will automatically affect the meaning of the other calls in the system, especially those dealing with food and danger. For instance, logically, the call ABCD would then mean *food, no danger*; EFGH would then mean *no food, danger*; and CDEF could be another new combination, possibly having the meaning *no food, no danger*. While still extremely primitive, such a development would represent the first breakthrough toward the invention of an open, productive system, such as language.

Another design feature of language, *duality of patterning*, can not exist in such a system as the one described above.

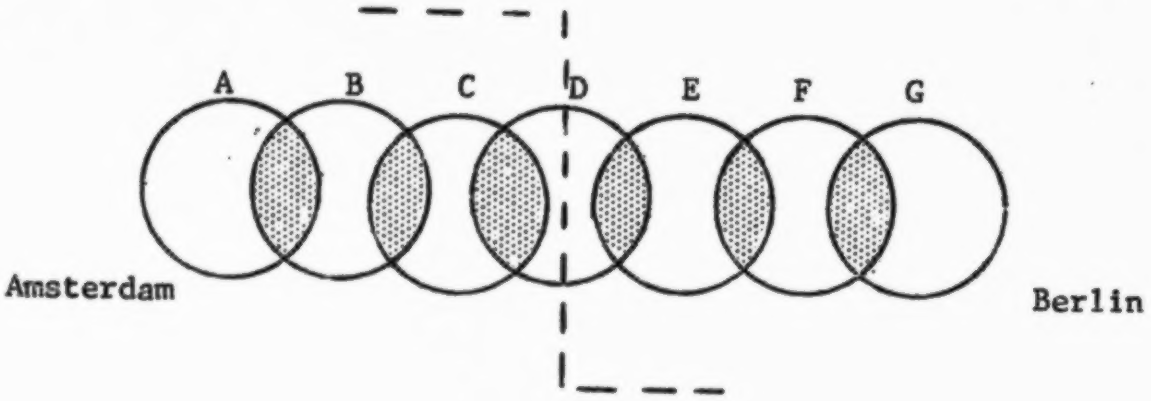
There is still another major step necessary in the development of a truly open system, such as language. In the kind of system that is combining two calls, the amount of productivity is very limited. It is not possible to expand the number of calls forever, for there is a limit to the number that people can remember, if each has to be totally different from any other. Earlier, when duality of patterning was discussed, it was stated that there had to be a system of signals that had no meaning, such as the sound units in language. If we took any ten words, such as cat, dog, hand, foot, food, danger, love, hate, kill, share, and had these as basic calls, meaning approximately what they do now, we could, by combining them, make the call system productive. No animals have been able to do this. They can only emit a call food, or danger, or kill. But combinations of calls, such as kill dog, love cat, or food, danger, are themselves the opening of this closed system, which we have discussed.

The next step toward the invention of a system like language is the taking apart of the sounds (discrete units) of one call to make other calls, not necessarily related at all. The example that we gave previously was that you take a word such as pit and you can take the sound units in these words and recombine them to make completely different words, such as taking the p i t of pit to make tip. This process may be the next necessary step in the progression of a call system, such as that possessed by the animals, toward a truly open and almost limitlessly productive system, such as language.

You must remember that so far this is only a hypothesis, a scientific guess based on what we now know. Perhaps at some future time we will be able to refine this hypothesis considerably. We do feel that scientific speculation about man's first and greatest invention, language, is worthwhile. It is only through this kind of advancing of ideas that man's knowledge about the world can grow.

1.5. The Concepts of Language, Dialect, and Standard Dialect. In the previous sections of this unit we talked about language as a general cultural phenomenon and listed its design features -- characteristics which are present in all languages. It must not be thought, however, that language may be characterized solely in terms of likenesses. We must also consider the differences that set the approximately 3,000 languages of the world apart from one another. In so doing we will be defining the term a language as opposed to language in general.

The way we define a language, such as Dutch or German, for example, is determined by two factors: (1) mutual intelligibility, and (2) political, geographical boundaries. In the figure below, circle A represents the speech of the people of Amsterdam, Holland, and circle G represents the speech of the people of Berlin, Germany. Partially overlapping circles B-F between Amsterdam and Berlin are the forms of speech used by five groups of people living immediately next to each other between the two cities.



The overlap (dark sections) indicates that any two circles lying next to each other share enough common words, grammatical constructions, and phonological features that the speakers of form C, for instance, can understand the speakers of form D. This is called mutual intelligibility. However, forms A and G at the two extremes are, since they have no overlap, considered two distinct languages, Dutch and German. They are not mutually intelligible -- German and Dutch speakers can not readily understand each other.

Separate languages, therefore,
may be defined as forms of speech
which are not mutually intelligible.

Speech forms which do show some overlap, such as A and B in the figure above, are called dialects.

> Dialects may be defined as forms of speech which are mutually intelligible.

The exact degree of intelligibility (that is, the degree of overlap in the diagram above) is, of course, quite often difficult to determine, and the problem of defining it is not as simple as the example above might seem to indicate. This example is an unusually simple one; others are much more complex.

The problem still remains in our Dutch and German example of deciding where between A and G Dutch stops and German begins. We have seen that at any spot along the way between Amsterdam and Berlin speakers living near each other will have mutually intelligible forms of speech. Consequently, we arbitrarily decide which dialects are German and which are Dutch by resorting to determination of where the political and geographical boundaries between the two countries lie. This boundary has been indicated as a broken line in the figure above. Notice that the boundary goes right through one group of dialects, circle D. For simple convenience sake we say that all speakers to the left of the broken line (circles A, B, C, and half of D) speak Dutch. All speakers to the right of the broken line (half of circle D and all of circles E, F, and G) speak German, even though the speakers of dialect D all have the same speech forms. Thus, saying what is German and what is Dutch, other than that the extreme dialects of Amsterdam and Berlin are not mutually intelligible, is largely a matter of historical accident -- where the political dividing line between the two countries has been historically set. The same situation will be found in many parts of the world. It is, then, difficult to define any language exactly, except in the two terms discussed above. If the two extremes are not mutually intelligible forms of speech, we are dealing with two different languages; the problem is to define geographically where one stops and the other begins. This, as we have seen is decided by definition if the political boundaries. If the two extremes are, however, mutually intelligible, as, for example, the speech of San Francisco and New York City, we know that we are dealing with a single language, even though there may be more than one dialect involved.

Most languages, particularly those spoken over large geographical areas, such as English, Dutch or German, have dialects. These were indicated in the diagram above by the interlocking circles.

Dialects are forms of speech which share a sufficiently large common or partially common core of phonological, grammatical, and lexical (word) characteristics to be considered the same language -- that is, they have high mutual intelligibility. Each, however, also has its own unique linguistic features, not all of which are found in the other dialects of the language.

In our diagram the dark overlapping sections of the circles indicate the common or partially common features, while the rest of the area within each circle represents that dialect's unique characteristics.

A dialect is spoken by a definable group of people who are set apart from other speakers of the same language either by some one or more social characteristics, by the fact of geographical separateness, or by both. In the examples we have discussed so far, we have been speaking about geographical dialects. Within each of the geographical areas outlined by the circles in the above figure, we also will have what may be called social dialects. Determiners of social dialects are, among many factors, age, education, occupation, nationality, and religion. The German atomic physicist speaking the dialect of circle G, Berlin, will have a different occupational social dialect than the stone mason of the same city and dialect area. Each of these social dialects will involve use of a certain vocabulary, particular grammatical constructions and, perhaps, even a particular phonological structure.

It must not be thought that each speaker of a language speaks only one dialect, Quite generally, especially in societies where the social roles of a single person are numerous and varied, a person will speak not only the ordinary geographical dialect of his own region, but will also speak a varying number of social dialects, each one acceptable in its own surroundings. The Berlin atomic physicist, for example, will not use the specialized dialect of his occupation when talking with the stone mason. He will use the ordinary geographical dialect of the area, the dialect which they both have in common. The stone mason, too, will not use the technical terms of his trade when talking with the atomic physicist, but will also use the ordinary geographical dialect which he and the atomic physicist share in common.

It should also be emphasized that all speakers of a language speak a dialect. When we say "He doesn't speak good English; he speaks a dialect," the word "dialect" implies only that the speaker is using what we consider unacceptable modes of expression to a given region or social group.

Many languages have established by law or by unwritten convention a standard dialect which is considered the most acceptable form of the language for normal social situations. For instance, in our previous example of the Dutch and German dialects, the Dutch dialect of Amsterdam is usually considered the standard dialect of Dutch. The standard dialect may be that of the majority of the speakers of a language, though this is not necessarily the case. Quite often, it is the dialect of the socially and politically dominant part of the population, regardless of numbers, and is, furthermore, the particular social dialect of that dominant group which serves as a means of communication in the greatest number of social situations. For example, the standard dialect of British English is that form of speech used by the more educated sections of the population of south-central England. This dialect, centering around London, has for centuries been the dialect of much of the nobility and many of the leaders of Britain's government, though in numbers they are surpassed by speakers of other dialects. In other instances -- this is increasingly true of American English and the languages of other societies which utilize mass media such as radio, television, newspapers, and air transportation for rapid communication or actual physical transportation from one area to another -- the standard dialect may be a blend of elements from several or all dominant dialects. The resulting somewhat artificial dialect can be given no particular geographical location as its "home."

The standard dialect, regardless of its precise nature and origin, usually becomes the one taught in the schools and the one considered correct and proper under the majority of social situations. It will usually be spoken over a wide geographical area, often an entire country; but its speakers will also speak their own local dialects of the language and a number of varying social dialects which may differ in some respects from both the local geographical dialects and the standard dialect. The standard dialect itself may develop sub-varieties as time goes on, if it is spoken over a large area. Within American Standard English a wide range of variation in pronunciation is permitted, Usually the pronunciation of local geographical dialects is simply used as well for standard dialect. However, there is less freedom permitted in word choice, inflectional patterns(such as the past tense forms of verbs),and word combinations into phrases, clauses, and sentences. There is even less variation permitted in the meaning that is attached to specific words and grammatical constructions. Hence -- moving from sound (pronunciation) to form (words and their arrangements) to meaning -- standard dialect usage becomes more and more rigid.

Within any dialect -- standard, local geographical, or local social -- there are three levels of usage. These are formal, general, and unacceptable.

Formal usage is limited to highly standardized types of public expression, such as speeches, legal proceedings, etc. Word choice, word arrangement, and meaning are rigidly dictated and may not be altered.

Unacceptable usage is that which employs such highly divergent pronunciations, word choices, grammatical contructions, and meanings that it is considered incorrect in the dialect being used. WHAT IS UNACCEPTABLE IN ONE DIALECT MAY BE PERFECTLY ACCEPTABLE IN ANOTHER.

General usage includes all that falls between and is, therefore, the most frequently used usage level in all dialects.

In the light of the above it should be clear that many pronunciations, grammatical constructions, and words may not be thought of as wrong or incorrect in an overall generalized sense. They must simply be taken for what they are -- special geographical or social dialect forms perfectly appropriate in their own settings. However, while these variant dialect usages are not incorrect in any absolute sense, it is nonetheless true that many of them are frowned upon in the standard dialect, and the speaker who does not learn to replace them by standard dialect forms when he is in a social situation which demands use of the standard dialect will be considered uneducated --as, indeed, he generally is. Though such problems may not be of concern to some people, use of the normally accepted standard dialect forms may in many cases help determine the reaction the hearer will have to the person who is speaking. In a job-interview, for example, proper dialect selection may be crucial. Some of these problems will be discussed at greater length in Unit V, Effective Oral Communication. In general, it is important that all speakers of languages which have a standard dialect, such as American English, be aware of the linguistic characteristics of that dialect.

1.6. The Scientific Method. So far we have talked about language as a part of total human culture -- certainly the most important part. We have talked about the invention of language, its various design features, and the concepts of a language and dialect. No mention, however, has been made of the study of language. Since this is the very purpose of this book -- the study of a specific language, English -- it is not out of place to say a few words about the study of language.

There are many different ways in which language in general or specific languages can be analyzed and studied. These varieties of language study will be discussed in detail in Part V. For our present purposes we may simply say that we will be using the linguistic method.

One of the definitions of the word linguist is a person who speaks many languages, a polyglot. This is perhaps the definition you are used to. The word, however, has a second definition, which is the one that we will be using. A linguist is a specialist who applies the scientific method to the analysis and study of languages the same way that an astronomer, a physicist, or a chemist applies it to the study of phenomena in the inanimate physical world and in the same way a biologist applies it to the study of the living world. There are several different approaches that linguists, or language scientists, may take in studying language, but they all have in common the use of the scientific method.

If a linguist is a scientist, we must obviously know what the scientific method is before we can fully understand what the linguist is trying to do. Many people unfortunately think that the scientific method means simply the use of "sound reasoning" or "logical thinking". This idea is only partly true. There are probably as many ideas of what "sound reasoning" and "logical thinking" are as there are people in the world. The scientific method, however, is a very specific type of "logical thinking." It is a very easy thing to define, and you should know exactly what it is. It has become one of the basic ways of looking at things in the world today, and a person is not thoroughly educated unless he is well aware of what the method is and how it works.

As a way of reasoning, the scientific method began well over two thousand years ago. Many ancient Greek thinkers, the most important of which was Heraclitus, developed the basic ideas of the method. It was, however, largely forgotten in Europe during the Middle Ages and did not reappear as a prominent way of looking at problems until after the fall of the Byzantine Greek city of Constantinople to the Turks in 1453. This forced many philosophers who had maintained the traditions of their Greek past to move bodily to Italy or other parts of Western Europe. Among other things they brought with them the scientific method. The Islamic peoples of the Near East and North Africa were also familiar with the Greek idea of scientific research, and they, too, re-introduced it to Europe through the Moslem conquest of Spain in the year 711 A.D. The method was rapidly picked up by European thinkers, producing such well known early scientific minds as Galileo, Copernicus, and -- somewhat later -- Newton. From these early beginnings, primarily in the fields of astronomy, chemistry, and physics, the method became the serious method of technical investigation in European thought. It naturally enough came to the New World with the European colonists of the 1500 and 1600's. It has perhaps received more use as a thorough method of investigation in the United States that in any other country of the world.

Briefly, the scientific method is a way of looking at things, describing them, and of drawing general conclusions about the way they operate. It consists of seven very specific steps which must be followed in the order in which we will describe them.

Let us suppose that we are in a foreign country and that we see some people shake hands with each other when they meet on the street. Other people, however, in the same country do not shake hands when they meet. Our immediate impression is that hand-shaking is a form of greeting. Why do we draw this conclusion? We do so simply because this is what hand-shaking means in our society. Drawing such a conclusion is not a use of the scientific method. If we wished to analyze this happening scientifically, we would say:

(1) I have seen some people shake hands when they meet on the street. Not all people do this, however.

(2) One guess about the meaning of this gesture is that it is a form of greeting, as in the United States and Western Europe. Is this the correct answer?

Step (1) above is the first step of the scientific method. It consists of observation. We see something new that we have never seen before. When this happens we immediately react by wondering what it means. Such wondering is step (2) of the scientific method. Step (2) is called the hypothesis (which simply means "guess"). Notice that we do not jump directly to the conclusion that hand-shaking is a form of greeting. Instead we make the hypothesis that this may be what it means -- but we don't know for sure yet. Our task is to find out for sure what hand-shaking does mean in this new society.

Step (3) of the scientific method consists of data gathering. This step is different from step (1), observation, though it may seem much the same. In data gathering we find out all that we possibly can about hand-shaking in this society. Let us say that when we question native members of the society we find that only members of a certain religious group use the hand shake and that they use this gesture when they meet or leave each other. Furthermore, we find out that it is used only immediately before or after a religious service. We already can see that our first hasty conclusion was drawn too quickly without adequate data.

After we have learned all that we possibly can about hand-shaking in that society, we go on to step (4) of the scientific method. This consists of experimentation. We watch all members of this religious group both before and after their religious services. We also watch other people in the society at various times to see if they ever shake hands.

Experimentation is like both observation and data gathering in that we are looking carefully at what is going on. It is different from the earlier two steps, however, because experimentation is much more thorough than either our first casual observation or our more careful gathering of data. Experimentation is a rigorous, complete examination of every scrap of evidence concerning our problem that we can conceivably find. Every science has its own special procedures of experimentation to insure that all possible circumstances in which the problem being investigated can occur are actually looked at in detail. If all the possible examples of hand-shaking agree in detail with our initial observations and the data we previously gathered, we go on to step (5) of the scientific method.

Step (5) consists of verification or refutation (acceptance or refusal) of the hypothesis made in step (2). You will remember, our hypothesis was that hand-shaking is a form of greeting. In this case we must refute or refuse our hypothesis, since we have found that hand-shaking is a religious gesture, not one of greeting. If our hypothesis had originally been that this was a religious gesture, then we could have said that we had verified it, and that it was true.

In the light of our data gathering and experimentation, we set up a new hypothesis, saying that hand-shaking in the society we are concerned with is a religious gesture. We can not stop here, though. We must start again with step (1) and go completely through the scientific method again step by step. We must observe closely; we must gather data again (even if it turns out to be the same data we gathered before); we must experiment again. Then we finally come to step (5), verification of refutation, a second time. If, after this second session of applying the scientific method, we find that our new hypothesis holds true, then, and only then, do we go on to step (6) of the method.

In our example we purposely made our original hypothesis -- that hand-shaking is a gesture of greeting -- incorrect. We did this to point out an important part of the scientific method. This point is: even if it seems that we are wasting time and duplicating our earlier efforts, no hypothesis should be considered true without thorough data gathering and experimentation. As an example of this procedure in another science, let us look at the perfection of the Salk polio vaccine. Dr. Jonas Salk and his co-workers had observed, made hypotheses, gathered data, and experimented for many years before they announced to the medical world that they had found a vaccine to prevent infantile paralysis. Even then, however, government scientists had to go through all the steps that Salk had already taken in determining for themselves that the hypothesis of polio-prevention was true. Months and months were spent in applying scientific reasoning to Salk vaccine. Finally, when other scientists had satisfied themselves that they agreed with Salk -- his hypothesis about the vaccine was true -- it was placed on the market for use with human beings. The scientific method is very time consuming. Like a democracy, its wheels grind slowly, but, we hope, more perfectly than other methods of reasoning.

If a hypothesis is verified throughexperimentation , we then say, in step (6) of the method,that it is a theory. A scientific theory is a hypothesis which has been proven true.

Finally, if a theory never seems to have any exceptions over many, many years and generations of observation, we may in some cases say that it is so universally true that it is a scientific law. This is the final step, step (7), of the scientific method. A scientific law is a theory that has withstood the trials of time. There seems to be no exceptions to it over a long period of time. As you probably know, there are very few scientific laws. Newton's laws of motion are examples, but for every law there are a thousand hypotheses and theories which have been wholly or partially disproved.

These seven steps, followed in precisely the order given, constitute the scientific method. It is true that this is a method of "logical thinking" or "sound reasoning," but it is in addition a very specific method of looking at new things, analyzing them, and coming to some conclusion about what they mean. To summarize, the method involves the following steps:

(1) Observation
(2) Hypothesis making
(3) Data gathering
(4) Experimentation
(5) Verification or refutation of the hypothesis
*(6) Establishment of a theory from the hypothesis
*(7) Establishment of a law from the theory

The starred items above -- theory and law establisment -- do not come immediately after the hypothesis is verified. It may, as in the case of the Salk polio vaccine, take years or even generations of further data-gathering and experimentation before the hypothesis becomes so certain that it will be considered a scientific theory, or, eventually, a scientific law.

Aside from the steps themselves in the scientific method, the order in which they are carried out is of extreme importance. One should not, as we did at first in our example of hand-shaking, leap from observation to theory (or, in general terminology "conclusion"). As we saw, such a procedure was inclined to make us think that hand-shaking in our imaginary society meant the same as in our own society. This is not the scientific method, because we have left out all the steps between observation and theory establishment. Furthermore, our conclusion was not correct; it was a religious gesture, not one of greeting. You can see that the scientific method generally leads to better and more probably true conclusions than other forms of reasoning.

Another type of reasoning starts with an arm-chair theory -- dreamed up with very little observation and with no data gathering. People who follow such a procedure will then go on to gather data that seems to uphold their theories, completely neglecting other data that does not fit, or "sweeping it under the rug" where it can not be seen and considered. This type of reasoning is definitely not scientific, either, and, though very commonly used, is extremely dangeroud, since it prejudges what data is to be used. It may, furthermore, be intellectually dishonest, since it often tends to hide data which do not fit the theory. In short, it is absolutely necessary that data gathering and experimentation come before theory making. If they do not, we generally do not get a true nor complete picture of the material we are working with.

A linguist, to repeat ourselves, is a scientist who studies both language in general and specific languages. Below are quotes from three imaginary writers on language. Would you say that any of them are linguists?

> (1) Although the Spanish vowels are pronounced differently than English vowels, the Spanish consonants are pronounced the same as in English except for ll, z, and rr.

Your answer should be "no" about the writer who wrote the above sentence. It should be "no", since our imaginary man has not used the scientific method. He has not looked at Spanish consonant sounds, made a hypothesis about how they are pronounced, gathered full data on their pronunciation, further experimented with their pronunciation in many new cases, and then given a theory of Spanish consonant pronunciation. Instead, he has started from English consonant sounds and simply assumed that similar Spanish sounds are the same. He has started with a theory, that is, and then observed Spanish sounds. He has turned the steps of the scientific method around backwards and has, as well, omitted most of them.

> (2) Unlike Latin, English uses the subjunctive mood in the verb very rarely, and the gerundive is used in English quite differently than in Latin.

Again the answer should be "no", for the same reasons as before. This man has taken the theory of Latin grammar and tried to apply it to English grammar, without making any observations and hypotheses about English grammar itself. Such procedure is not the scientific method.

(3) The words of Albanian are quite different from those of English. Therefore, we can safely say that Albanian and English are not related languages.

For the third time your answer should be "no." This man is not a linguist, since he, too, fails to follow the scientific method. He has started with step (1) of the method -- observation of Albanian words, but then he has leaped directly from there to step (6) and stated his theory that Albanian and English are not related languages. If he had gone further and followed steps (2) through (5) of the method, he would have found that Albanian and English are indeed related languages, though very distantly so. He would have seen this if he had followed the scientific method, because he would have had to gather much more data than he did.

The types of statements given above are very typical of non-linguistic statements about language. Though on first glance they seem to be satisfactory, a full examination of the details of the languages in question will show that they are very incomplete and that, actually, they are not even correct. Anyone who learned Spanish, English, or Albanian from books written by the above writers would not learn those languages well, since he would not have all the information needed for communicating in those languages, and what information he did have would be presented in a confusing, incomplete, and incorrect manner.

Without making any apologies, it can be said that the great majority of English grammars used today were not prepared by linguists. Consequently, the details of English often seem dry, uninteresting, confusing, and difficult to many students. We feel that a full presentation of all the information about English as a language will let you see that English does have reasons behind what may seem to be peculiar rules of spelling, punctuation, speaking and composition. These reasons can be seen fully only through using the scientific method to analyze and describe English. They can not be seen if English is presented in terms, for instance, of Latin grammar, which it usually is.

English simply isn't Latin or any other language. English is English -- nothing more -- and it must be analyzed and explained in terms of itself. Some of its aspects may be very similar to Latin, while others may be quite different from, or even lacking in, Latin. Certainly Latin, too, has certain grammatical ideas that English does not have and never did. If we use Latin grammatical ideas as a model for describing English we will miss many of the grammatical points present in English but not in Latin, and we will prejudge the way English "ought to be." It will end up being a strange sort of Latin, which it is not. Again, English is English. We must look at English data, make some hypotheses about what the data means, experiment with it, and finally come out with some theories about the way in which English works as a language. That is the task of this book.

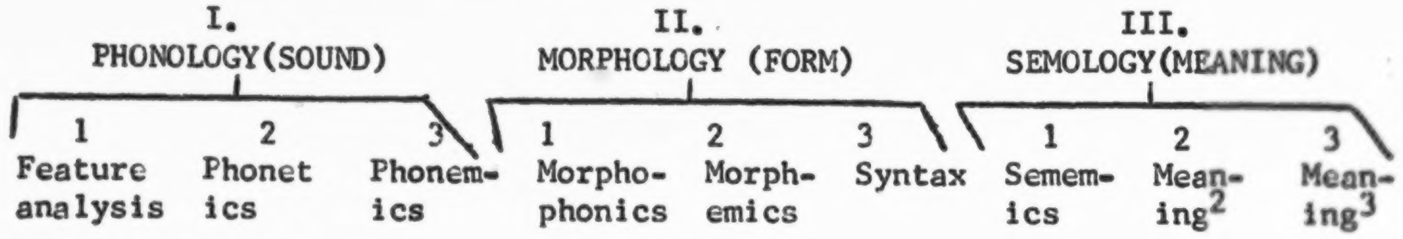
1.7. The Linguistic Method of this Book. In Parts Two through Four of this book we will not only be using the linguistic method to study English, but we will also be using a very specific type of linguistic method. The one we will use has been developed over a period of years by Dr. George L. Trager and Dr. Henry Lee Smith, Jr., of the State University of New York at Buffalo. It has been applied to an analysis of English both by Drs. Trager and Smith and by numerous other linguists throughout the country.

Basically the method consists of an analysis of the speech forms of any dialect by levels. First the sounds are carefully listened to, recorded and analyzed. This gathering and classification of information on English sounds by means of the scientific method constitutes the study of English phonology. Under phonology we study: (1) the smallest parts or features of each sound; (2) the way these features bundle together to form single sound units or phones; and (3) the way the phones combine to form larger, more significant sound units called phonemes. Phonology is the first major level of linguistic analysis.

Once we have thoroughly discussed the phonology of English we go on to a discussion of the ways in which the sounds combine to make linguistic forms (words, parts of a word, and larger combinations of words). This area of investigation is called morphology. Like phonology, morphology may be subdivided into three smaller levels of investigation: (1) the way in which phonemes group together from dialect to dialect to form what are called morphophones, the smallest parts of linguistic forms; (2) the way in which morphophones bundle together to form units or morphemes, and words or lexical items; and (3) the way in which words fit together to form phrases, clauses, and sentences, a continuity known as syntax. Morphology is the second major level of linguistic analysis.

After the sounds and forms of English have been analyzed, we next analyze the meanings of the forms. This is the third and final major level of linguistic analysis, it is called semology. The three sub-areas of semology, corresponding to the three under phonology and morphology, have not been given names as yet, though the first level has been tentatively called sememics and is concerned with the smallest parts of linguistic meaning.

We may diagram this system of linguistic analysis as follows:



Phonology is often called pronunciation; morphology is often called grammar; and semology is often called meaning. The 1 level under each major level is concerned with the parts of the units of the larger level (features, morphophones, sememes). The 2 level is concerned with the units themselves (phones, morphemes, meaning 2). The 3 level is concerned with the distributions of the units (phonemes, syntax, meaning 3). Each of these areas is carefully investigated, working from an analysis of features to phones, phones to phonemes, phonemes to morphophones, and so forth, until we have reached the highest level of meaning analysis, meaning 3. In all cases, investigation is carried out according to the principles of the scientific method presented in the preceding section of this unit.

Part II of this text will be concerned with the first major level of analysis, phonology. Part III will deal with the second major level, morphology. Part IV will deal with the third major level of analysis, semology. Though these areas of investigation may not be clear to you now, they will become so as you yourself work with them in units that follow.

CUMULATIVE EXERCISE

During this course, with the class working as a group, gather items on language, especially the English language, from newspapers, magazines, radio, recordings, films, television, and even conversation. Put each to the scientific method test, as appropriate. If you have not yet reached the requisite knowledge called for by any items, put them aside for consideration when you reach the pertinent point in this course.

UNIT TWO

OUR DEVELOPING LANGUAGE

Introduction
2.1. Our Language Ancestors

The Development of English and Its Dialects
2.2. Early Influences on English
2.3. The Norman Conquest and English
2.4. English Returns as *The* Language
2.5. The Emergence of Modern English

The Development of American English and Its Dialects
2.6. The Beginnings of American English
2.7. American Regional Varieties and Levels of Usage
2.8. American Standard Dialect

The Development of English as a World Language
2.9. The 18th Century Emphasis on Reason and Classic Precedent
2.10. The 19th Century Expansion
2.11. The 20th Century

The Development of the Study of English
2.12. Pre-18th Century
2.13. 18th Century
2.14. Post-18th Century
2.15. The Uses of the Study of English

UNIT TWO

OUR DEVELOPING LANGUAGE

Introduction

2.1. Our Language Ancestors

father	Vater	pere	pater	pater	pitar-
brother	Bruder	frere	frater	phrater	bhrater-

Can you identify the languages? If you cannot identify those in the last column, it is understandable. They are from Sanskrit, a language of India. What would you say about these languages on the basis of the examples?

The inclination was probably there to say they are related because the words look alike. But that would hardly be using the scientific method, to jump from some sample pairs of words to a theory covering several entire languages. At any rate, some words can look alike in quite unrelated languages, simply because they are taken over bodily into those languages: Kohlrabi, tortillas, sukiyaki, and goulash are examples from foods. These are merely borrowings as distinct from cognates -- words similar because the languages they represent are related, stemming from a common older language.

Scholars of language have established that all the languages represented by the pairs above -- English, German, French, Latin, Greek and Sanskrit -- are related. They belong to a group called the Indo-European languages (see map on next page). Notice also that the northern European versions start with an /f/ sound, while the southern European ones begin with a /p/ sound. The northern version came about in a great shift of consonants throughout several languages.

This shift was first demonstrated in 1822 by a scholar, Jakob Grimm, one of the famous fairytale brothers, following a Danish scholar, Rask, He could hardly have done his work had Sanskrit not been discovered, especially with a complete and excellent grammar of it written by Panini about 400 B.C. Sanskrit was then taken to be the predecessor, or mother language, of the European languages which resemble it in key characteristics. Another such language scholar (usually then called a philologist), Karl Verner, confirmed Grimm's findings about the shift, as well as accounting for a number of exceptions that Grimm himself, and his critics, could not explain, finding that stress had much to do with the shift.

Other examples of the shift:

	Latin	English
/d/ to /t/	duo	two
/g/ to /k/	genu	knee
/t/ to /th/	trēs	three
/k/ to /h/	centum	hundred
/t/ to /d/	centum	hundred

The vital importance of these studies was to establish, once and for all, that languages change gradually, generally (that is, overall), and systematically, not just here and there by isolated accidents. They also established a basis for modern language study which has extended our knowledge not only of today's languages but also of Sanskrit, showing that it is not the direct ancestor of the Western European languages, but that all these languages have a common parent language. How do we know? We can tell from certain words common to all these languages. From these words we can also establish where, in all likelihood, the languages originated. All have words for snow; for trees like pine, beech; for animals like wolf; and birds like hawk, eagle. These words show that the Indo-European languages probably started roughly on the European-Asian border, and spread both eastward and westward, as well as southward. We can even reconstruct, at least in part, what this ancestral language (Proto-Indo-European) must have been like by taking the structural characteristics basic to all the languages and by taking into account changes in the more modern ones.

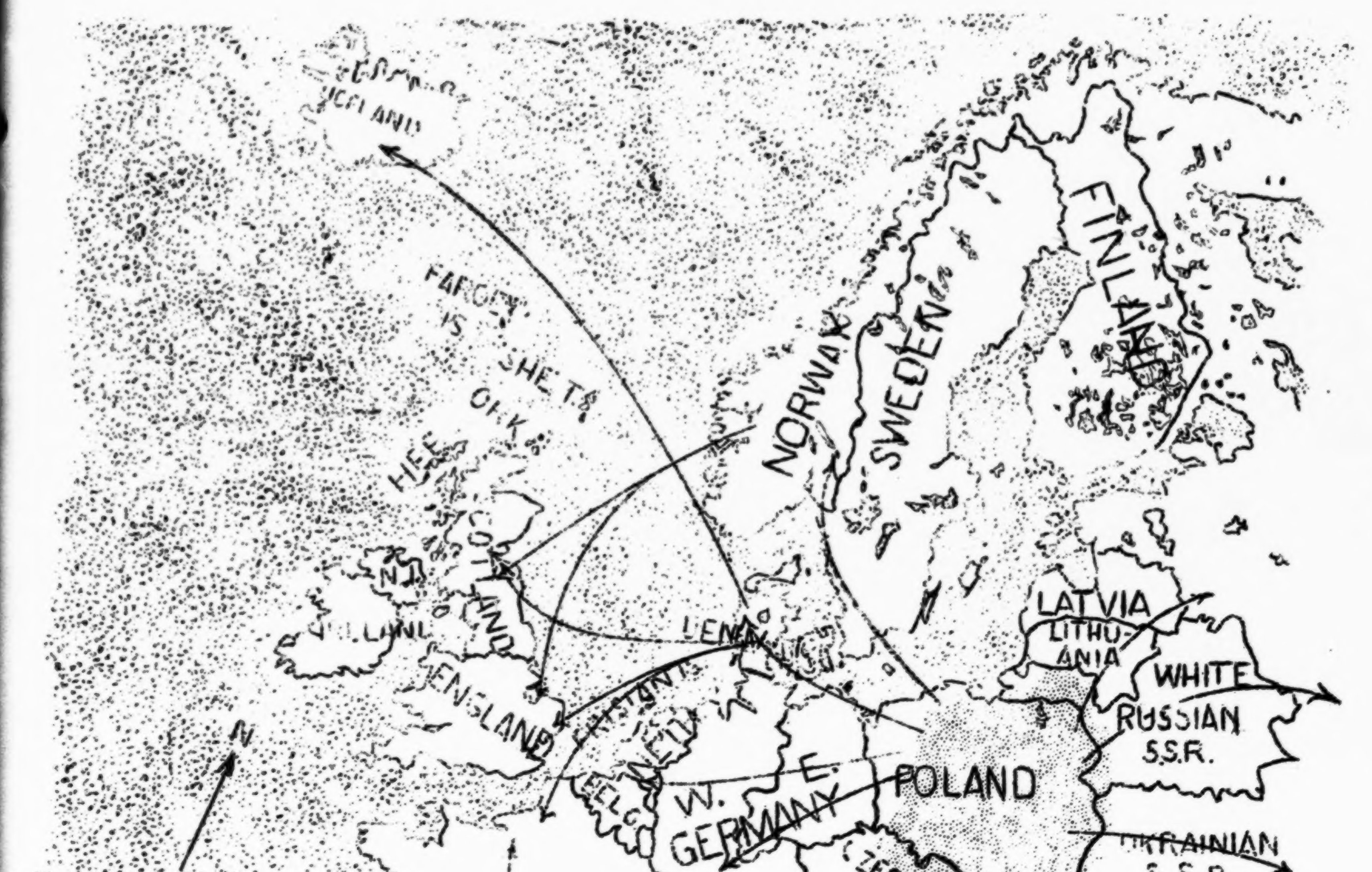
The Indo-European languages of Western Europe split into three main families. Southern Europe produced the Romance languages -- Latin, Italian, French, Spanish, Portugese. Northern Europe produced the Germanic group -- German, the Scandinavian tongues, and English. Celtic, which once covered much of Western Europe, exists mainly in Brittany, Ireland, and Scotland (Gaelic). And there are smaller groupings within the larger ones, the Scandinavian languages being a good example.

Other Indo-European families are the Indic (India, Pakistan); Iranian; Armenian; Hellenic (Greek); Albanian; and Baltic and Slavic (languages of the Iron Curtain countries, except Hungary and Albania).

EXERCISES:

1. List the equivalent word (synonym) for the following English words in French, German and Spanish: hall, sugar, figure, festival/fete, (Example: wine, vin, wein, vino). Try to find out whether they are cognates or borrowings into English.

2. From your knowledge of history list some languages that have migrated, indicating from where to where and whether each is


ICELAND
FAROES IS
SHET IS
ORK
HEB
N.I.
SCOTLAND
IRELAND
ENGLAND
DENMARK
NORWAY
SWEDEN
FINLAND
LATVIA
LITHUANIA
WHITE
RUSSIAN
S.S.R.
POLAND
NETH
BELG
W.
E.
GERMANY
FRANCE
SWITZ
AUSTRIA
CZECHOSLOVAKIA
HUNGARY
UKRAINIAN
S.S.R.
MOLDAVIAN
S.S.R.
RUMANIA
YUGOSLAVIA
BULGARIA
ALBANIA
GREECE
TURKEY
CRETE
ITALY
CORSICA
SARDINIA
SICILY
PORTUGAL
SPAIN
ALGERIA
TUNISIA
MOROCCO
N

SPREAD OF INDO-EUROPEAN LANGUAGES FROM PROTO-INDO-EUROPEAN

(Proto-Indo-European location marked by shaded area around present-day Poland) still flourishing in the new residence. Examples: English to America (still there); French to America (still in Quebec).

The Development of English and Its Dialects

2.2. Early Influences on English At one time speakers of Celtic languages covered much of Western and Central Eurpoe. The Celts invaded the British Isles in two waves: one by the Goidels (approximately 1200-600 B.C.), the other by the Brythons (Britains, approximately 400-200 B.C.). The two groups spoke differet dialects of Celtic. The Goidels originally inhabited much of England, Wales, and Cornwall and all of Ireland, including the Isle of Man, which lies between England and Ireland. The Goidelic speakers of England, Wales, and Cornwall were replaced or absorbed by the invading Brythonic speakers around 400-200 B.C. Consequently, when the Germanic speaking Angles, Saxons, and Jutes invaded England in the 5th and 6th centuries A.D., they found Brythonic dialects spoken in those areas. These new invaders, from what is now Denmark and westward, defeated but did not subjugate the Brythonic Celts, most of whom withdrew into remoter parts of the British Isles where they were left in peace. Some of them, the Welsh, survive as a thriving speech community to this day. Another, the Cornish, lasted until around 1800. Many moved across the British Channel to the northwest coast of France. They still survive as a speech community there -- the Bretons. The Angles, Saxons, and Jutes did not come into continued direct contact with the Goidelic speakers of Manx, Irish, and its offshoot, Scots Gaelic. English invasions of these areas came much later. This dispersion of the Brythonic Celts of England to remoter regions is the reason that only remnants of Celtic remain in English -- a few terms for terrain and some place names.

The Brythonic Celts had lived through an earlier invasion by the Romans during the time of Julius Caesar, 54 B.C. The Romans did not try to Romanize "barbarians" wholesale , but welcomed those who wanted to become Romans. In fact, one who adopted their language and ways became eligible for Roman citizenship. Thus Latin and the Brythonic Celtic dialects evidently fourished side by side without any great middle-ground mixing of the two. Any influence of the latter on English was therefore also meager because the Roman occupation was in itself not sustained and became,in turn,part of the Celtic withdrawal. Only a few Latin military terms, those attached to sitesof fortification, survived from this Roman influence.

The Anglo-Saxon invaders mark the beginning of English. They inherited the few Celtic and Latin leftovers; but vastly more important, they filled with their own language (three dialects) the language vacuum left by the successive historical departures of the Romans and Celts. The Angles settled in eastern Britain in what came to be called Anglia; the Saxons in the Southwest, West Saxony; and the Jutes along the southern shore of the Thames. As a result, four dialects grew up, the fourth being one north of the Humber river. These four dialects constituted what we usually call Anglo-Saxon or Old English, the basis of modern English (Anglo-Saxon, Angleland, England, English).

The Anglo-Saxons stemmed from a simple, primarily agricultural background. Their vocabulary contributions are therefore from such a life:

cow stone bone eat horse seed
hen dog ox eye scythe wheat

The Old English vocabulary (and when we speak of the language in this way, we include all its dialects, much as when we speak of American English we include Southern, New England, Midland, etc.) was from our point of view simple, because the culture of the people was not highly developed in technology and abstract thinking. Their life was basically an agricultural one, and so naturally, was their vocabulary. But its structure was every bit as complex -- some people think more so -- as that of modern English.

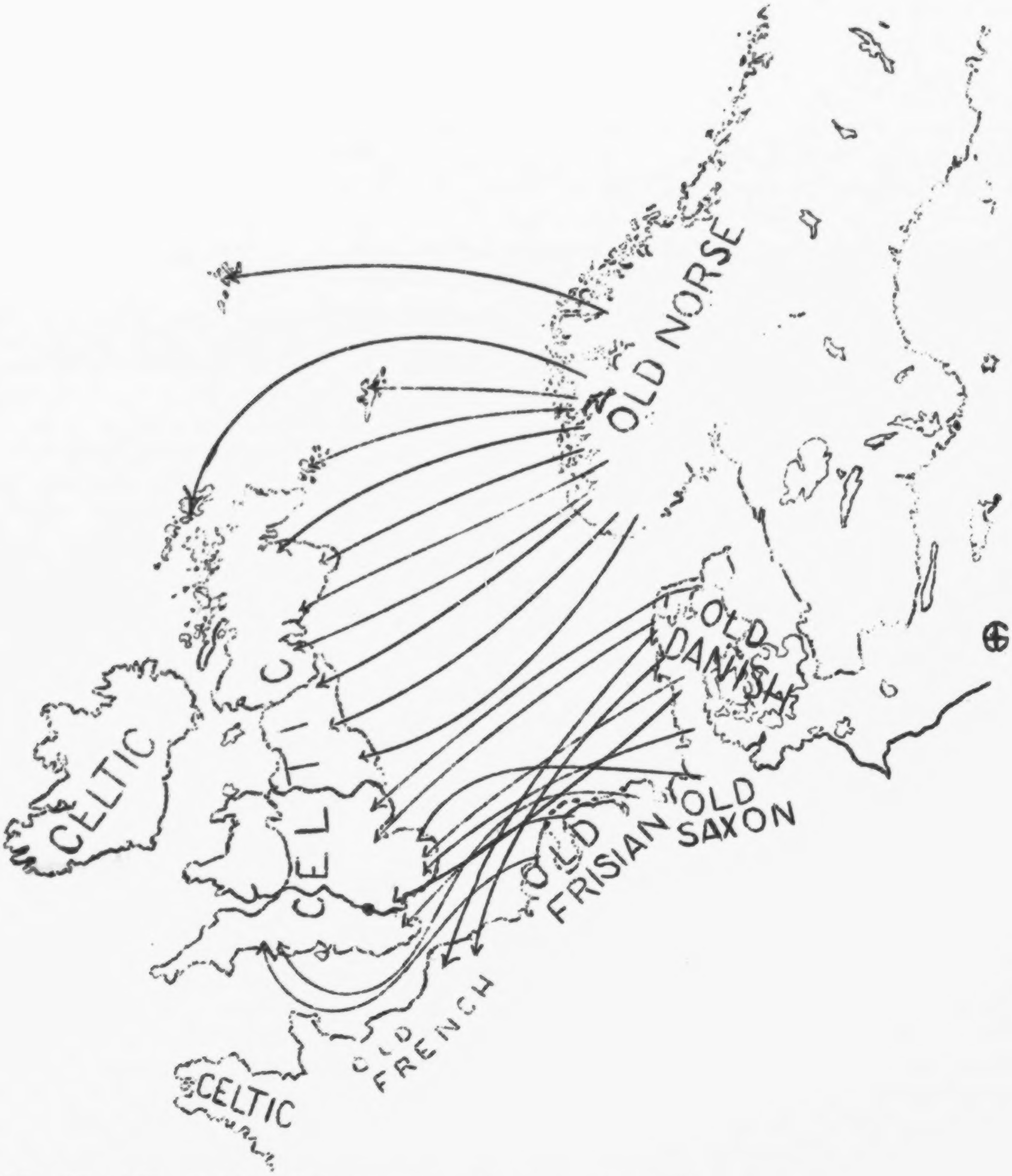
Here, for example, are the forms of the noun stone:

	Singular	Plural
Nominative Case (Subject)	Stān	Stānas
Genetive Case (Possessive)	Stānes	Stāna
Dative Case (Indirect Object)	Stāne	Stānum
Accusative Case (Direct Object)	Stān	Stānas

(Note: Some Indo-European languages have 5, 6, and even 8 cases)

Which of these forms do we still have? The nouns were also classified as masucline, feminine and neuter (this was a matter of grammar rather than male and female), and as strong and weak. This meant that each adjective also had all these forms. What is the comparative situation today? The article, pronoun and verb were equally complex. The verbs were classified as strong and weak, with the former changing their vowel (as in ring, rang, rung) while the latter remained constant (as in watch, watched, watched). The strong verbs outnumbered the weak about three to one.

Word formation, too, was plentiful; there were noun, adjective and adverb suffixes, and sometimes prefixes, so that from one part of speech others were formed. Words also were put into compounds (earhring, earring).


OLD NORSE
OLD DANISH
OLD SAXON
OLD FRISIAN
OLD FRENCH
CELTIC
CELTIC
CELTIC

SOURCES OF AND EARLY INFLUENCES ON OLD ENGLISH

Would you now accept the statement made earlier, that the structure of Old English was every bit as complex as today's English is?

The first great influence on Anglo-Saxon or Old English was that of Latin through the Church. Pope Gregory the Great in 597 A.D. sent St. Augustine and his forty monks to Christianize the British Isles. There was no armed opposition whatever, and in less than a hundred years the task was accomplished, without a single martyrdom. This favorable reception is important linguistically, as many words were readily borrowed when there were no Anglo-Saxon equivalents. Examples are altar, chalice, candle, synod, epistle, deacon, disciple, litany, hymn, martyr, mass, organ, psalm.

The second great influence on Anglo-Saxon was that of the Scandinavian Vikings: first from the east; later from the Danes, old-time neighbors of the Anglo-Saxons on the continent. The Vikings were seagoing people, less given to agriculture; we would expect their contributions to be in keeping, and they were. They used the seaside towns as ports, as bases, and, when they stayed on, as places of settlement.

The later contacts with the Danes were even more influential on the English language. The Danish attempts to conquer Britain came in three stages. From 787 to 850 A.D. there were forays against the southeastern and eastern coasts, with much pillaging and little settling. In 850 the Danes invaded with 350 ships. Again there was much plundering, but also a greater domination of territory and an attempt to extend their influence into Wessex (earlier, West Saxony). Early successes were nullified by the advent of King Alfred the Great (871-899) and his eventual victory over the Danes (in 878), who were thereafter to remain east of a line from Chester to London. Thus their previous conquest and occupation were actually made legal!

Under King Alfred there was now a time of peace, during which he could lead his people in the peaceful, civilizing tasks he had in mind for them. He improved government and instituted many reforms; but what influenced the English language most of all was his sponsorship of monasteries and securing some of the finest scholars from the continent to staff them. He himself learned several languages. He then had all the remnants of Anglo-Saxon manuscripts still in existence carefully copied down by the monks, and had many Latin words translated into Old English. Most of the Old English literature, therefore, exists today in the version of his day. What dialect would that be? This fact would suggest that it became the forerunner of modern English; but such was not to be the case, history changing the obvious course, as we shall see.

The third stage of Danish invasion followed Alfred's reign. As heroic English defenses were countered by greater invasion armies, made possible by an alliance between the Kings of Denmark and Norway, the English began to pay bribe or tribute money. Understandably, the price continued to go up, and eventually actual conquest succeeded under famed

King Cnut (in 1014), who also conquered Norway.

Since the Danes were old continental neighbors and linguistic cousins of the Angles, Jutes and Saxons, their languages aided easy interchange, helped by the early Christianization of the newcomers. Since the latter settled predominantly in the East and Southeast, the dialects there (Mercian and Northumbrian) were affected most.

The Scandinavian vocabulary influences are not hard to find and characterize. But there was, likewise, influence on the structure of Old English. First, the Scandinavian pronouns *they*, *their*, and *them* replaced the Old English *hie*, *hiera*, *him*. Can you see why this might have happened to eliminate confusion? Sometimes the newcomers merely tipped the scales in one direction. Thus the plural of *to be* in the north was *we aron*, while in West Saxon it was *syndon* (still found in the German *sind*). Why, geographically, did the former win out?

Our question regarding Scandinavian influence on English structure presents another opportunity to show how modern linguists can work to supply scientific answers. It has often been said that, because, leaving out relative pronouns is a characteristic of the Scandinavian languages, the English tendency must have come from there.

Examples:

The money that he had earned.
The money he earned.

Those whom he loved.
Those he loved.

Linguist Max S. Kirch has done the only thing possible. He has consulted all the old Scandinavian and Old English manuscripts and found that this tendency developed concurrently in both, though more quickly in Old English.

EXERCISES

1. Think of ordinary farming terms (pre-machine) and check in your dictionary which are Anglo-Saxon in origin.

2. List words now in use that have the equivalent of the following Old English suffixes: -*ig*, -*full*, -*lēas*, -*līce*, -*nes*, -*dōm*, -*scipe*. Do the same for the following prefixes: *a*-, *be*-, *for*-, *fore*-, *ofer*-, *un*-, *under*-.

3. A characteristic group of Scandinavian contributions to English started with *sk*-. Consult a dictionary and list the main ones (think of the *sounds* rather than the *written letters*).

2.3. *The Norman Conquest and English.* As the Danes had foraged, settled and conquered in Brittany, they had done likewise in northwestern France along the Seine River. Here, too, they made a treaty (912 A.D.) recognizing their right to occupy a limited territory, Normandy.

The Anglo-Saxons began trading with the Danes who had taken northwestern France (here they were called Normans, for Norsemen), but had themselves adopted the native language, Old French, and religion, Christianity. One might expect the conquerors to force their language and customs on the conquered people, or at least to keep their own. This did not happen because the conquered people had the kind of civilization -- art, literature, government, religion, language, and the like -- which the Danes wished to possess. These Normans thus continued the civilization and helped climax it by the great Gothic cathedrals with their pointed arches and beautiful stained-glass windows. They also sent missionaries and scholars to the Anglo-Saxons. The languages of the Church were Greek and Latin; thus many Greek and Latin church words became part of English. From the Greek came *bishop*, *priest*, *school*. From the Latin came *cross*, *cup*, *rosary*, *scripture*. Many words in other fields were adopted as well. Examples are *history*, *custody*, *index*, *legal*, *intellect*, *picture*, *polite*, *rational*, *secular*, *testimony*, *tributary*, *nervous*, *ulcer*, *zenith*.

It was only natural that kinsmen from both sides of the channel should have steady interchange and should intermarry and so hold sovereignty over dukedoms (Norman) and earldoms (English) that include territories in both Britain and Normandy. Thus when the English King Edward died childless in 1066, there were claimants to the throne from all sides, including William, Duke of Normandy. The latter landed with his forces unopposed, and defeated the English claimant, Harold, at the famous Battle of Hastings in 1066.

The warfare of those days was man to man, with nobles having to earn, not inherit, their knighthood. Consequently, the ranks of the English earls were decimated by their losses in the defeat. William replaced them by appointing Normans to their titles and estates. As other English nobles and clergy died, they were also replaced by Normans. Then, too, the Normans married into the English noble families, there being so few English nobles left to carry on the old lines.

We can readily see the kind of language pattern that would form: the language of the Court and ruling class generally became French; the language of the Church and Law Courts remained Latin. The Normans held French to be the civilized language and therefore inappropriate for less civilized, ordinary people. These were permitted to continue speaking English. Those of the English upper class who wished to continue in, or return to, positions of prestige and power would speak what language?

Do you think there was a complete split among those who spoke French, Latin and English? Indicate some community activities which would require a language overlap and just how that overlap might work out in practice. These social conditions consequent upon the Conquest literally transformed

Old English into what the scholars call Middle English, a transitional phase in the progression of our language into Modern English.

English used by only the ordinary people and by those dealing directly with them, was not much bound by social demands. Such freedom had already occurred in Old English. Thus the northern or Northumbrian dialect, farthest from its European source and from other influences, tended strongly toward simplifying the inflectional pattern of its grammar. The new, lowly status of English simply provided a virtually ideal climate for extending the tendency. As a result, phonetic ease led to the change of -*m* endings for nouns and adjectives to -*n*, thus eliminating one group of forms. The survival of -*n* can easily be understood from the ease of saying it. The -*n* ending gradually faded, and as a consequence, the vowels in the inflectional endings came to sound alike and so were eventually written as -*e* (Chaucer's final -*e* is the result).

Nouns changed also in their plurals. Old English has -*s* and -*es* in one group of nouns and -*en* in the other. The latter survives in *oxen* and *children*, but lost out everywhere already in the centuries after the Norman Conquest, except in the conservative Southern dialect where it survived in some strength until the 13th century. Adjectives not only followed the nouns in loss of endings, but surpassed them, so that by 1500 they had lost all inflectional endings.

As nouns and adjectives lost more and more endings, they could,of course,not be identified by those endings. Hence a noun as actor had to precede the verb, the acting, and the noun as receiver of action had to follow the verb (subject + verb + object: S+V+O). Too, with the endings of the indirect and direct objects (IO and DO) becoming the same, these had to come in some regular order, especially in doubtful cases. Example: *He gave her him* means something quite different to us from *He gave him her*. Which object, then, now always comes first?

Once the word order of the English sentence became relatively fixed, the pronouns could also lose their inflections. All of them did except the personal pronouns. Why would they be an exception? To help you answer, think of what meaning*s* each of the following sentences could have:

She gave she she.
She likes she.

The major change in verbs was a rapid continuation in the loss of strong verbs (those with vowel change). About 160 were lost, 81 changed over to weak, 13 developed a weak form alongside the strong one, and many others simplified from 3 forms to 2 (*slide*, *slid*, *slid*; *cling*, *clung*,*clung*; *spin*, *spun*, *spun*). That is the score today, and the process is still continuing; but the bulk of the changes had taken place by 1500. It should be added that new verbs always follow the weak pattern (*televise*,*televised*; *automate*, *automated*, *automated*; can you give some other examples?).

We have found that, as English words lost their inflectional endings, they had to fall into specific sentence positions so that the meaning would be clear. This is true of phrases or word groups as well as of sentences.

For example, Old English prepositions were often separated from their objects ("and them there against fought," using the modern words). With the loss of identifying noun endings, the preposition began to appear fairly regularly before its object, where it now takes its position automatically.

In Old English, adjectives tended to come before nouns when they were general, numerical, etc., and after the noun when they were descriptive. In Middle English they quickly tended to appear before the noun regardless of kind. The speed of this positioning directly parallels the speed with which the adjective shed its endings.

Finally, Old English used a great variety of sentence patterns. Here are but a few of the variations, translated literally into modern English wording:

S + V + DO: There Danes gained victory.
V + DO + S: Then met them King Alfred.
S + DO + IO + V: He them him back gave.
S + V→ +IO+ ←V: That was to them known.
V + S + DO: Then answered he them.
S + DO + V: He sleeping songfest in his mind had.

Most of these faded from general use rather swiftly in the late Middle English period and are today quite the exception. The first, on the other hand, has become the basic sentence pattern, as we have already noted, with these variations of essentially the same word order: S + V; S + V + IO + DO; S + V +[*]PN; S + V +[x]PA; S + V + OC (Objective Complement). Give sample sentences for all these.

People could thus really use any sentence order whatever in Old English, although of course they preferred some patterns to others. We must now, however, -- since English lost most of its inflectional endings --work to build variety into a very few patterns. So language often becomes simpler, easier, in some ways, only to become compensatingly more complex, more difficult, in others.

The structural changes just cited as indicative of the tremendous influence of the Norman Conquest on English are paralleled by significant changes in vocabulary. Some new French and Latin borrowings began to enter the English vocabulary almost at once, prompted primarily by commercial, governmental and social necessity. People who spoke only, or almost only, French did not need to borrow French words. People who did not speak French at all also had no reason for such borrowing. That is why the massive borrowing came later, when the ruling classes once more spoke English. And then the kinds of borrowings would be obvious: terms of government and social class; terms of the Church and Ecclesiastical

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[*] Predicate Noun

[x] Predicate Adjective

Courts, especially with the translation of the Bible into Middle English; terms of law; military terms; and the terms of a highly fashionable social life -- manners, dress, sports, foods, games, the arts; terms representative of the increasing interest in science and philosophy.

EXERCISES

1. When the Latins of Rome conquered the Etruscans from north of the Tiber River, they got, among other things, the Phoenician alphabet and their way of writing from right to left. Where did they later get the left to right way? Where, do you suppose, did we get our left to right way?

2. The medium for sending messages is vital to communication. How are papyrus and parchment better media than clay tablets? How may the latter be the better one?

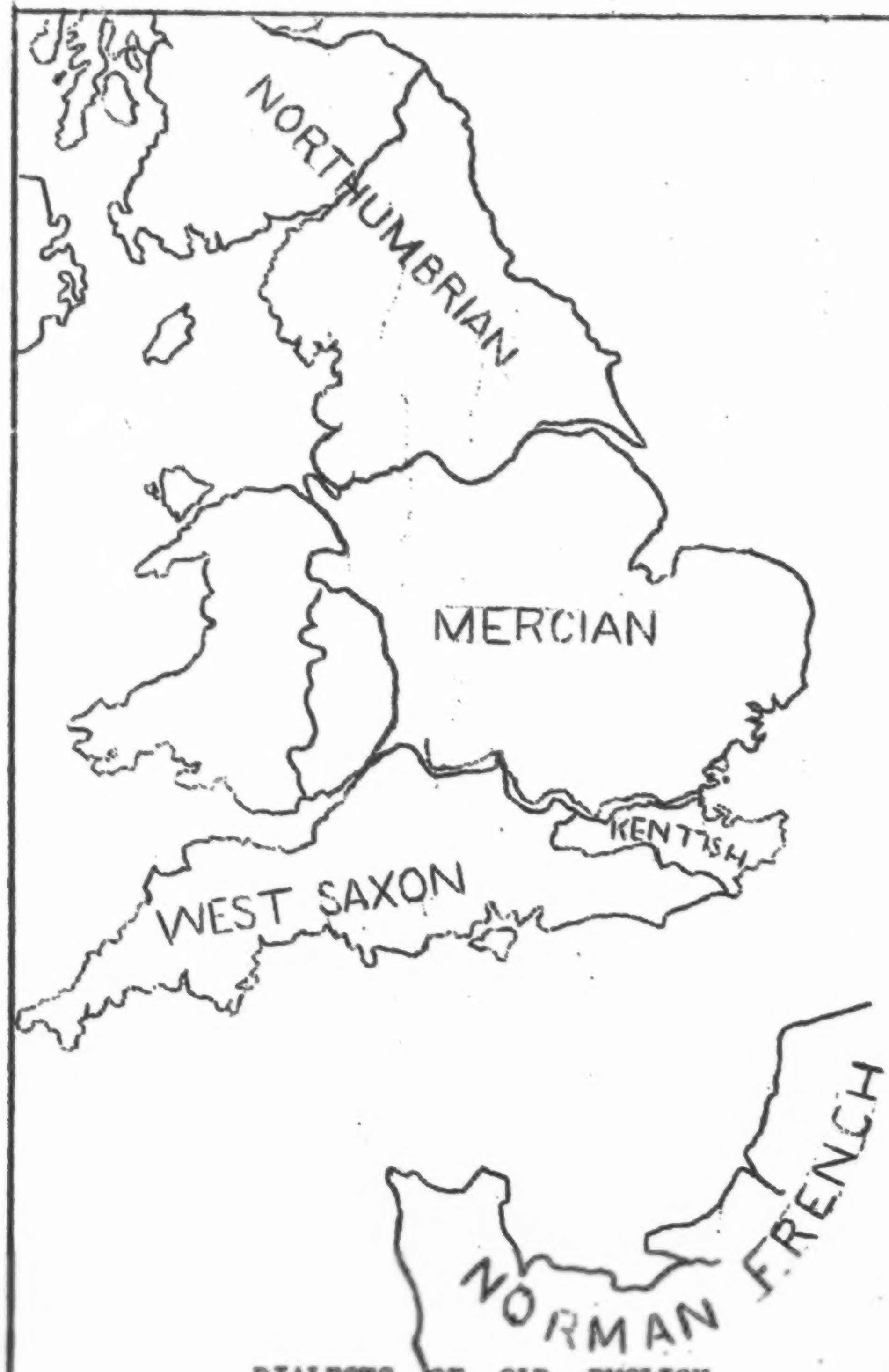
3. The mode of communicating is also vital. Was the language use of English tby the ordinary people after the Norman Conquest oral or written? Would this make any difference in language change, like dropping the endings?

4. Why did the Humber river make such a big difference in English dialects, whereas the Normans were able to maintain their language quite well on both sides of a larger water barrier, the English Channel?

2.4. English Returns as The Language. Two questions must be answered. First, how did English return to be the language of all the people? Second, in view of the four dialects which we have noted but could not discuss extensively, what was the English that returned?

How do you suppose the King of France felt about Normandy as part of the English King's realm? Understandably, when the chance offered, the French King Philip declared Normandy as French and seized it. In reprisal, the estates belonging to French nobles were seized by English King John. The process of separation between the two kingdoms occurred by edict and by family agreements (most families held estates in both realms) between 1204 and 1205. In the nationalism that gradually emerged, the allegiance to the English language, as opposed to French, became a part of the picture. English was not only tolerated, but increasingly spoken as a heritage to be proud of. The Hundred Years' War with France (1337-1453) helped solidify the new language alignments.

The process of re-adopting English as the national language must not be thought of as a sudden thing. A parallel way to think of it would be the establishment of some language other than English as official by our own country. Think of the mass media, courts, governments, business, and the task of rewriting or translating everything, and changing over the


NORTHUMBRIAN
MERCIAN
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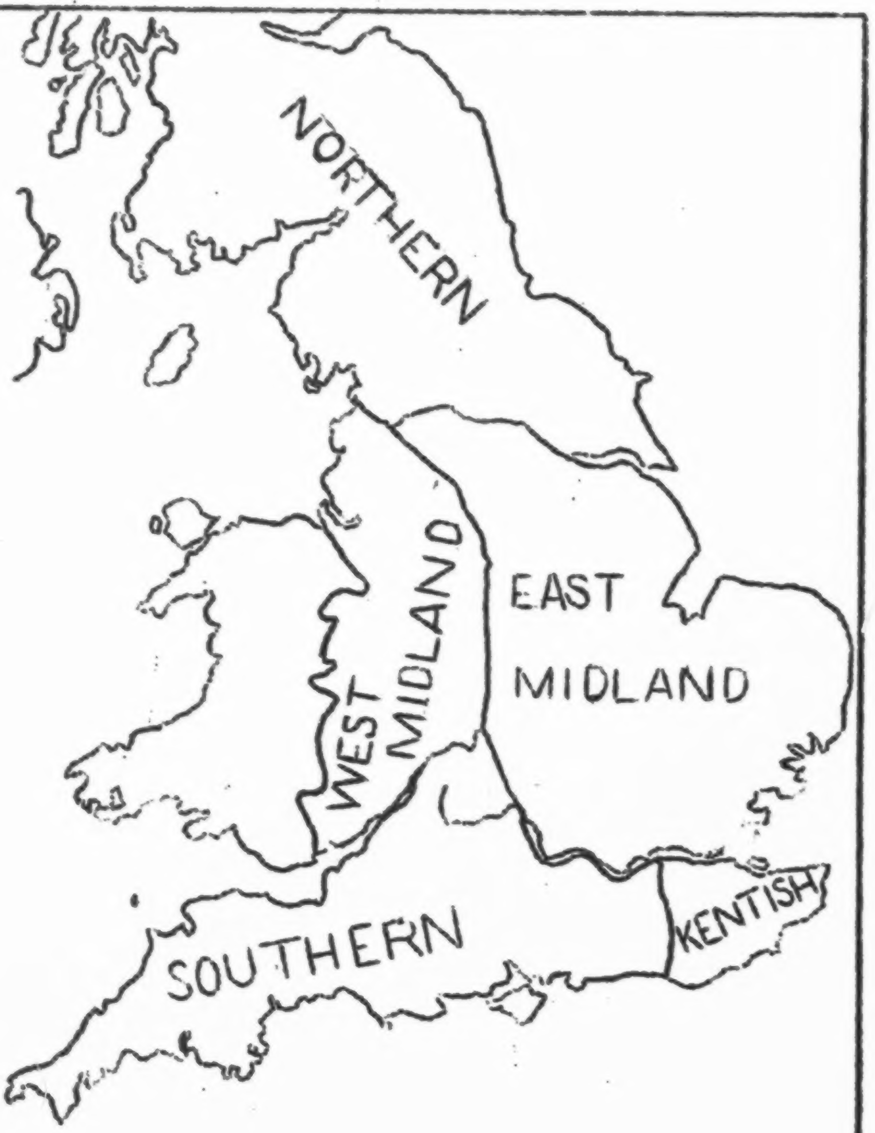
NORMAN FRENCH

DIALECTS OF OLD ENGLISH


NORTHERN
WEST MIDLAND
EAST MIDLAND
SOUTHERN
KENTISH

DIALECTS OF MIDDLE ENGLISH

entire educational system. Or think of how very little progress has been made on something many people think needs doing -- overhauling our system of spelling. Happily, the slow, systematic character of language change has forestalled any wholesale spelling change-over until the discovery that English spelling, as we shall see, is morphophonically quite systematic. We have erred in thinking it phonemic and therefore phonemically inefficient, with far too many exceptions and contradictions.

It is not surprising, therefore, that English did not come into general use until the mid-fourteenth century, being declared as the proper language of London's sherriffs' courts (1356), of lawsuits under national law (1362), as a subject in schools (1349); in general practice by 1385; and of town and guild records (1430). The changeover thus took more than 150 years.

Our second question, what English became the English, might be answered by a simple parallel, The Attic dialect was that of Athens and became the official Greek. The dialect of Rome became the official Latin, and,as it gradually changed, Italian. So also the dialects of Paris and Berlin became the official French and German respectively. What city held a similar place in the affairs of England, as a center of the nation's activities? How does this help explain why King Alfred's West Saxon dialect did not become the primary one?

Let us recall that the Angles settled eastern and middle sections of England, and that these gradually diverged into two dialects: Northumbrian, north of the Humber river, as the name implies; and Mercian, south of the Humber to the Thames River. The Saxons settled the region south of the Thames (West Saxon dialect), while the Jutes occupied the southeastern corner(Kentish dialect). These settlements and dialects naturally overlapped, but our general outlines are valid.

We have already noted that the Northumbrian (Middle English Northern) dialect was quickest and most sweeping in its sound changes and in its loss of inflectional endings because it was farthest from its point of origin and so had least contact with the continent.

Mercian, West Saxon and Kentish were, progressively, more conservative. These three, with some realignment of territory, developed into Middle English East and West Midland and Southern. Now London lay on the Thames, the approximate border between East Midland and Southern. Its language characteristics,therefore,were strongly East Midland and somewhat Southern. On the other hand, since people from all dialect regions traveled through and settled there, its language was also rather cosmopolitan. It might even be called a dialect melting pot. Thus the overall characteristics of London English were middle ground, with some of the conservatism of Southern, with an overlay of cosmopolitan melting pot, and with the academic influence of Oxford and Cambridge universities.

An event that aided both English and London cosmopolitanism was the highly contagious disease epidemic known as the Black Death, 1348 - 1350. It killed an almost unbelievable number of people, 30% being the carefully reasoned estimate. It hit hardest among the poor living in close quarters: in short, the city. It decimated the nation's labor force by nearly half. Merchants, artisans, and other skilled workers were at a premium and flocked into London from everywhere, bringing their varied English dialects with them. Since they could command high wages, they increased their wealth and became prominent in community affairs, all speaking English.

Toward the end of the century, the great poet Chaucer, although a court ambassador and therefore fluent in French, decided to write his greatest works in English. His dialect was natively Southern modified considerably by his long residence in London. Thus Chaucer confirmed the pre-eminence of London English by making it the literary language, as it had already become the language of law, commerce, education and social life.

EXERCISES

1. Whose language prevails -- that of the conqueror or that of the conquered? Discuss.

2. (R) Look up the status of principal parts for the verbs dive and strive. A much-used parallel verb is drive. Do you think there may be any relationship between our use of it and the other two?

3. Linguists have established that the French vocabulary influence was very small until 1200, rose to a peak in the 1350-1400 period, and then steadily lessened. How would you account for this? Discuss.

4. We have been using the word conservative to describe dialects less inclined to change. Is a conservative dialect better than a non-conservative? Is any dialect better than any other? Discuss.

5. (R) Did the signing of the Magna Charta (1215) have any language overtones? May the troubles between Richard II (1381) and his constituents have had any influence whatever on the English language? These questions are meant to show that occurrences are usually considered politically, but not from the very important viewpoint of language.

2.5. The Emergence of Modern English. We have noted the emergence of English, that is, of the London version of the East Midland dialect, as our official language. Only two major changes characterize the transformation of Middle into Modern English.

The first is a vowel shift. We cited the forms of stān as an example of Old English inflections. Somewhere along the line stān became our stone; and it occurred in a general shift of certain vowel sounds that took place primarily in the 15th century. Once again the change was gradual, overall, and systematic.

From about 1100 on, the vowels began to be formed farther forward in the mouth. Those that were already being formed farthest forward dropped back into the place of those that moved out of the position farthest back.

Old English	Middle English	Modern English
Examples of forward progression:		
dael (pal)	dāle (dahl'-uh)	dale
mētan (great'-ahn)	mēte (great'-uh)	mete
mete (get'-eh)	męte (threat'-uh)	meat
dūn (dune)	doun (as in put)	down
glōf (loaf)	glōve (strove'-uh)	glove
Examples of forward to backward position:		
stān (Warren Spahn)	stōn (fawn)	stone
fyr (like German or French umlant - für, sur)	fīr (fear)	fire
fōda (rode'-ah')	fōde (rode'-uh)	food
gōd (go-d)	gōd (go-d)	good

Final -e was originally pronounced fully, then less and less until it disappeared. It survives in the writing system, seemingly as an indicator of regular vowel lengthening (complex nucleus, a term you will meet later): fat, fate; not, note

This shift has been illustrated by using equivalent present-day words, because you have not yet studied the sound system of English in detail. When you do so, you should return to the previous paragraph and insert the sound symbol proper to each example.

A second major change toward Modern English which took place in the early modern period was prompted by the invention of movable type for printing. Before it, all was in manuscript form. How were manuscripts done? by whom? The painstaking style of handprint of the monks was imitated on the new movable type to give us our first print style. Printing could do the same job much faster, and so much cheaper, and thus many people could afford books who had never been able to afford manuscripts. Further, books could be made available to students and so the necessity of dictating all material by teacher to students; was greatly lessened, and the time gained could be spent in discussion, reading, and research instead.

The coming of print coincided with the age of exploration we call the Renaissance. It was an era of both outer and inner exploration. The outer is obvious: all the famous explorations and settlements by Europeans of the Americas, Africa, and Asia, as well as new findings about the universe by Galileo and Kepler. The inner exploration consisted of a re-discovery of the learning of Greek, Roman and Medieval times through translation into modern English made available in books. The heart of the English publishing industry was the printers of London, thus further confirming London English as *the* English.

Modern spelling and punctuation are attributable primarily to the invention of printing. Earlier both had been done in only partial agreement. Manuscripts even of Shakespeare's day, though tending toward greater uniformity, often spelled the same word several ways on a single page. For example, the doubling of consonants after short vowels gradually fell off in last syllables, though meanwhile both versions were often used interchangeably (catte, catt, cat). The doubling was generally retained in the middle of words, and dropped entirely after diphthongs. Compare *later* and *latter*, *biter* and *bitter*. Can you give others? The diphthong often came to be signaled by a silent *e* at the end: *rat*, *rate*; *bit*, *bite*; *met*, *mete*. Give others. The printers tended to set the pattern of uniformity to simplify their type and to cut costs. The changes show a gradual systematic trend to standardization in our spelling, the nature of which is only now becoming clear to us.

In punctuation, too, certain uses gradually became more uniform, particularly in the use of the comma for inner punctuation -- to separate items in series, and words and phrases supplying additional information. Go to some reproductions of early printing and see such tendencies at work. Why would the London printers exert great influence also in punctuation? Again, steady systematization toward our present system is in evidence.

Many of the basic spelling patterns set in those days and adopted by the printers are still in effect. Now we know that language changes in all of its three aspects. But English had been set in its structural patterns (form), so that these merely continue to tkae stronger and stronger effect. And vocabulary (meaning) never stops changing. In the third aspect (sound) we have seen that our language changed even in the early modern period in the vowel shift.

Of one thing there is no doubt, then: our pronunciation is bound to be constantly, though not quickly, changing. Therefore, the parallel between talking and writing (of which spelling is an essential) will always change, thus seemingly increasing the difficulty of English spelling. But since English spelling consists of a system of written equivalents for the sounds in various word environments, it will probably be more adaptable to future sound change than some newly invented system that concentrates on the present and ignores dialect differences.

EXERCISES

1. The rooms where the monks did their writing were called scriptoria and what they wrote were called manuscripts. Why, do you suppose? (Consult a dictionary)

2. Were the printers who first set our spelling and punctuation equipped to do so?

3. If we did have one written symbol for each sound, how would differences in dialect affect the system?

4. Why have the simplified spellings catalog(ue) develop(e), and hono(u)r been taken up generally? Why is glamo(u)r often an exception to such acceptance?

American English and Its Dialects

2.6. The Beginnings of American English. Any age of exploration is also an age of exchange. Exchange of commodities and ideas brings a parallel exchange in language. And when exploration eventuates in settlement, language emigrates with the settlers and takes on the coloring of its new environment. Thus English was carried over the years throughout the broadening British Empire -- to America, Asia, Africa, and to many isalnd groups in every ocean. In each instance it has taken on some native coloring and then developed in its own right. The transfer to America is no exception.

The earliest English settlements in America were made in the early 17th century: Jamestown, Plymouth and Massachusetts Bay colonies. The settlers of these would have had their language schooling, whether at home or in school, in the late 1500's. Thus the English that first came to America was Elizabethan English: the English of Spenser, Marlowe, Shakespeare. A second ingredient was one not necessarily part of the early learning of the emigrants, but often of their more mature concerns: the English of the great translations of the Bible, whether Catholic, Anglican or Puritan, prompted by the increase in denominations. Recall, too, our earlier consideration of the vowel shift. Most of its changes had been completed by the time of the first emigration wave to America .

Thomas Wertenbaker in The Puritan Oligarchy shows how closely the New England settlements followed the Anglian pattern of the settlers. What might be called American Northern dialect, then, is based largely on British East Midland, including London. A second area of settlement, Jamestown and Maryland, resulted in American Southern dialect. Partly this represents a stronger British Southern factor in the Jamestown ranks. A third dialect, American Midland, primarily in New Jersey and Pennsylvania, was influenced most strongly by the Scotch-Irish wave of emigration bringing the freer British Northern dialect and strong Gaelic overtones. A minor influence was that of the Germans, which resulted in such colorful literal translations of structure and meaning as those of Pennsylvania Dutch English.

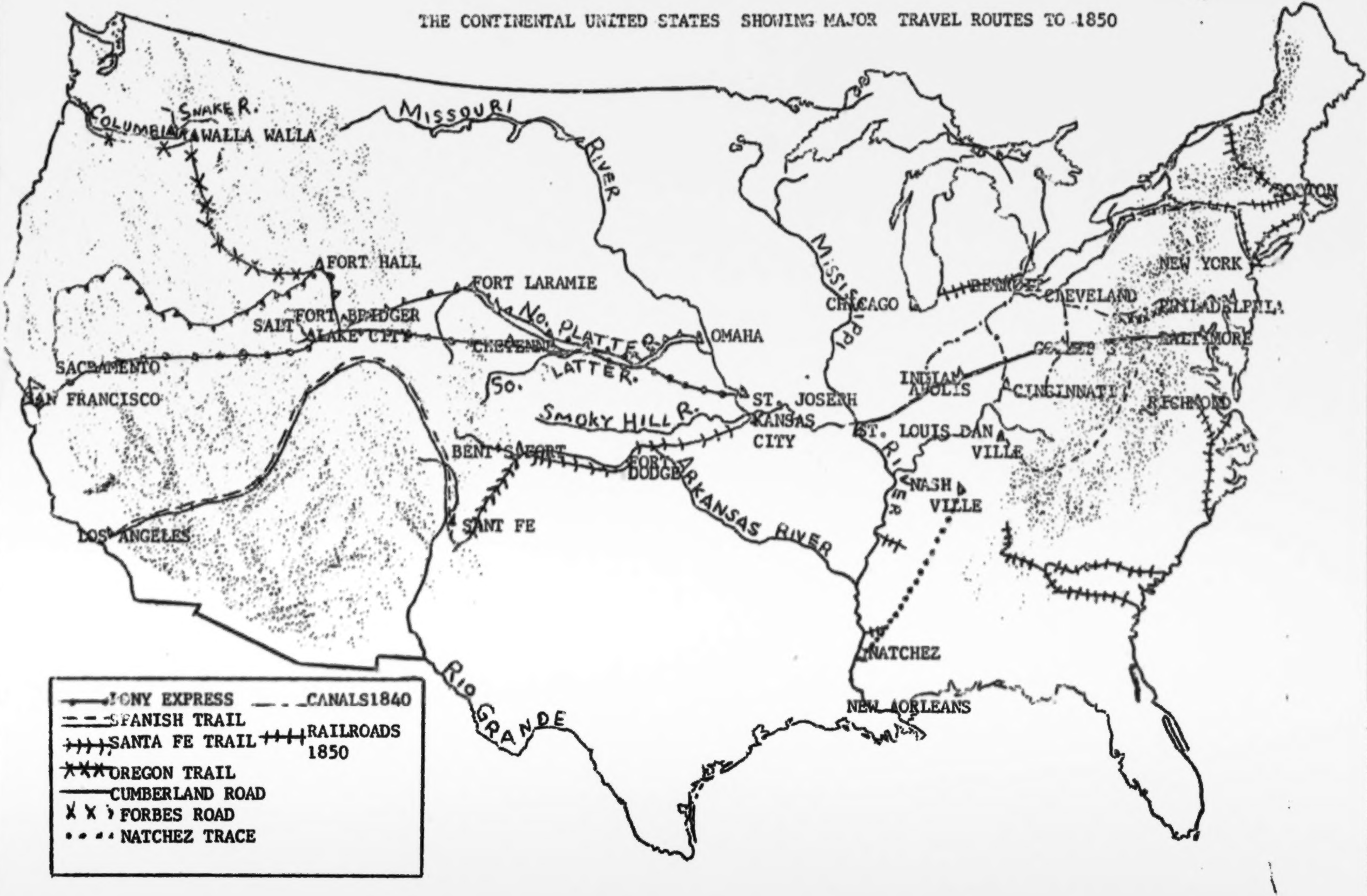
The second stage in American English was the movement from some coastal areas to others: Massachusetts southward to Rhode Island, Connecticut and then to New York; northward to Maine, and westward to New Hampshire. Some of the Jamestown settlers moved southward, and some went inland and northwest into central Pennsylvania and western New York. Thus we see American Northern, Midland and Southern dialects spreading, and, in the course of time, splintering into sub-dialects of the three. At the same time a new wave of settlers, primarily Scotch-Irish and Germans, settled in the back country. There was meanwhile also a substantial vocabulary take-over from the languages of the American Indians. It was this second stage of American English, therefore, which sent it down new and freer paths, so that almost from the beginning it became a melting pot language that subsequent waves of immigration from other origins merely confirmed and extended.

The third stage in American English resulted from the push westward beyond the Blue Ridge, Appalachian and Alleghany Mountains. The Cumberland Gap, the Delaware Water Gap and the flatland along the eastern Great Lakes and the Gulf, and other such breaks in the mountains afforded natural passages into the fertile central plains. Natural land routes were paralleled by natural waterways like the Ohio, Tennessee and Shenandoah Rivers.

In the early 19th century, particularly up to 1840, manmade ways were added to the natural ones: the great eastern trails were made into roads, and the rivers were connected into a network by the addition of canals. As you know, the triumph of the canal-builders was New York's Erie Canal, a marvel of engineering that kept east and west traffic within the boundaries of the United States. Very soon after 1840 the importance of many of the shorter connecting canals began to decline. What technological transportation change was responsible for the decline? This new mode of transportation made great strides in the East by 1850; west of the mountains the bulk of railroad building came late.

Let us now consider the language effects of these developments in the transportation of both people and goods. Even now one can follow New England's westward influence through the houses of upstate New York, Ohio, Indiana and even farther west. On the other hand, Pennsylvania barns also moved westward so that from Ohio on the New England house and Pennsylvania barn often appear side by side. Note on your transportation map the two westward routes which merged there. Do you think there were also language parallels in the margin? Quite understandably, these were the New England dialect merging with that of the Scotch-Irish who had settled in western Pennsylvania and also adopted the basic barn of the Pennsylvania Dutch. Some of the latter, mainly religious communities from what is now western and southwestern Germany, established still newer communities all the way across into Iowa.

THE CONTINENTAL UNITED STATES SHOWING MAJOR TRAVEL ROUTES TO 1850


COLUMBIA
SNAKE R.
WALLA WALLA
MISSOURI
RIVER
FORT HALL
FORT LARAMIE
FORT BRIDGER
SALT LAKE CITY
CHEYENNE
NO. PLATTE R.
SO. PLATTE R.
OMAHA
SACRAMENTO
SAN FRANCISCO
SMOKY HILL R.
ST. JOSEPH
KANSAS CITY
BENT'S FORT
FORT DODGE
ARKANSAS RIVER
SANT FE
LOS ANGELES
RIO GRANDE
MISSISSIPPI
RIVER
CHICAGO
DETROIT
CLEVELAND
COLUMBUS
INDIANAPOLIS
CINCINNATI
ST. LOUIS
DANVILLE
NASHVILLE
NATCHEZ
NEW ORLEANS
NEW YORK
BOSTON
PHILADELPHIA
BALTIMORE
RICHMOND
PONY EXPRESS
SPANISH TRAIL
SANTA FE TRAIL
OREGON TRAIL
CUMBERLAND ROAD
FORBES ROAD
NATCHEZ TRACE
CANALS1840
RAILROADS 1850

The roads, canals, and railroads required workers for their building. The latest immigrants were often the most suitable. And when a severe potato famine in Ireland sent thousands of Irish to the new world in the 1840's and 1850's, these most often became the labor gangs to lay tracks as their predecessors had dug the canals. Later they often sought their independent livelihood in the west. So the various dialects encountered each other and began increasingly to merge.

The availability of land on a large-scale basis soon transformed the newest immigrants into the newest class of wealth and leadership in the west. This is a little like the rise of the artisans in England after the Great Plague. It was, however, faster, more general, and more comprehensive in America. Our people went from one frontier to the next -- coast, upland, mountains, the eastern drainage basin of the Mississippi, the westward trek from that river, and finally the big push to newly discovered California gold ; and at each stage occurred further language mixing, despite the fact that single language groups often moved together as a body. That is how we get the nationality language communities of the western farm regions just as surely as we got them in the Eastern manufacturing and trading cities.

The process occurred over and over, and therefore none of our dialects ever got so set as to be strange (foreign, if you will), as has been the case with dialects in far smaller Germany, Italy, and England. You have heard of pockets of nearly Elizabethan English existing down to our day in some mountain districts of Kentucky, Tennessee, and West Virginia. These rare exceptions only prove how general the process of dialect mixing has been in the United States from the very first.

EXERCISES

1. Give examples of Indian place names and other vocabulary borrowings from Indians in your own region.

2. Find examples of place names from the explorers and settlers of the following countries: Holland, Germany, Spain, France. Can you find others?

3. (R) What other settlers and languages influenced American English?

4. (R) Collect colorful literal translations like the following: "Throw Mama from the train a kiss" (Pennsylvania Dutch saying which became a popular song) and "Dance me loose I warm so easy" (Sheboygan, Wisconsin, German).

5. (R) Did New York gain a whole series of Greek names in the early 19th century because these were settled by Greeks (Troy, Rome, Utica, Syracuse, Aurora, etc.)?

2.7. *American Regional Varieties*. American regional dialects are gradually being recorded in a project of regional language atlases -- maps of regional speech patterns -- of which one, the *Linguistic Atlas of New England* is already published and several others are under way. Together they will eventually form the *Linguistic Atlas of the United States and Canada*. This work in progress has already established the three general areas of American English.

Northern:	New England, New York, and upper New Jersey and Pennsylvania westward to the Mississippi
Southern:	Southern half of Delaware and Maryland and southwestward east of the mountains (Appalachian, Blue Ridge)to north central South Carolina and below that westward to the Mississippi
Midland:	The dialect between Northern and Southern subdivided into Northern and Southern influence areas.

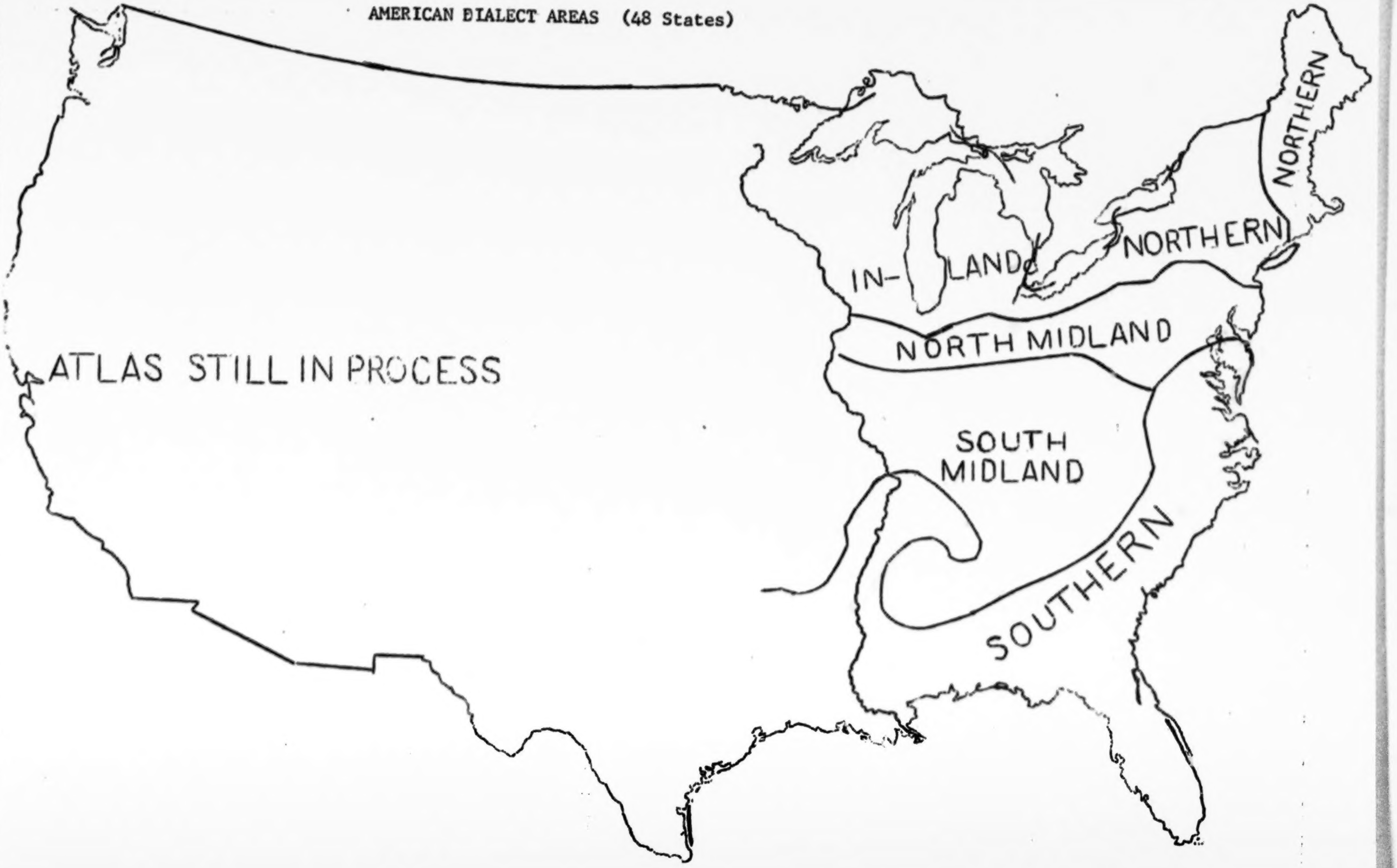
Each of these major areas is subdivided into a half dozen or more sub-dialect regions. Some of these are important even when they cover a comparatively small territory, like Metropolitan New York. The state of language usage from west of the Mississippi is relatively new to systematic study; it is therefore often labeled as a "Regional Dialects" section. Further variations are added by the accents of people from differet nationality backgrounds who learn English as a second language in their teens or later. Also, people today move about and travel so much that clearcut differences become rarer and overlaps become more and more frequent. Finally, each of us individually, after acquiring certain regional patterns when we are children, takes on all kinds of specific influences and overlays from people of other regions so that he turns out to be quite a mixture.

Each of the major areas has certain characteristics of pronunciation (sound), grammar (structure), and semantic meaning (vocabulary).

Metropolitan New York has hosts of people who pronounce the vowels before *r* and the *r* in *turn*, *bird*, and *ermine* as *oy*: *toyn*. You know the *r* sound added to words that end like *idea* by New Englanders and sub-New Yorkers (the sounds above came later), and the virtual dropping of *r* finally (*rear* : *reah*) and often medially (*parking* : *pahking*) by New Englanders and Southerners.

Regional expressions are often generally used: midwestern Northern *I waited on*(*you*, *the bus*) instead of the more usual *wait for*. From the same region come *all the further*, *the cat wants in*, and *Anymore it's getting harder to find drugs in a drugstore!* all are rather generally used, even by the educated. Other regions seem to find them quaint and so do not demur . The western and southern *allowed*, holding an opinion,as in "He

AMERICAN DIALECT AREAS (48 States)


NORTHERN
NORTHERN
IN- LAND
NORTH MIDLAND
SOUTH MIDLAND
SOUTHERN
ATLAS STILL IN PROCESS

allowed we'd have to work overtime," is another example. Regional differences in past participles of verbs become optional in dictionaries: *dived*, *dove*; *strived*, *strove*. So do simple past variants: *sank*, *sunk*; *shrank*, *shrunk*; *sprang*, *sprung*; *shone*, *shined*.

We have found regional differences in both pronunciation (phonology) and structure (morphology). The third component of language, meaning, also varies regionally. Sometimes different words are used for the same thing: Northern *stream* paralleled Midland *run* and Inland Northern *creek*. Eastern Northern *town* and *village* are paralleld by Inland Northern *township* and *town*. Northern *common* or *green* is paralleled by Southern and Inland Northern *square*. New York City's *blocks* are Philadelphia's *squares*. And we have explored only a very small set of names.

A second regional difference in semantic meaning lies in the same word having different meanings in different regions. Our example *town* is such a one, for in one of its denotations it means a small, densely populated place in the midwest,but a certain size area in the northeast. Do you know of any others?

2.8. *American Standard Dialect*. We now recall one important difference in the dialect development of British and American English. The latter had so early and so consistently a melting pot development, a mixing of dialects, that we have never had to adopt a formal standard dialect such as British Standard Spoken or High German. We have, however, developed an American Standard dialect. This varies mainly in its dialect pronunciations, though even these are generally understandable. It is highly consistent in its grammatical structures and vocabulary because of its use in the widest avenues of public communication, the mass media addressed to a national audience: newspapers, magazines, radio, recordings, films, television.

Two points need to be made about this "standard". It is the product of general language interaction in our society, not the decision of some people who might like American English usage to follow their beliefs and taste in language. Secondly, this general standard is neither rigid nor unchanging. A good illustration can be found in an advertisement that caused a big stir in language circles: "Winstons taste good like a cigarette should." There were shocked reactions to the use of *like* instead of *as*; there were even editorials in some of the very periodicals that contained the ad. Yet such use of *like* was once prevalent in English, then virtually outlawed, and now gaining popularity again. The media who carry such usage and criticize it editorially actually have official guides of American Standard for pronunciation and usage which their speakers and writers are required to follow. Examples are the announcers' handbooks of the national radio and television networks and *Write It Right*, a selection of usage dicta to the writers of *The New York Times* by Editor Theodore Bernstein. These guides undergo periodic revision in usage as well as vocabulary; they seek to reflect general cultivated taste and to act as a check against an anything-goes view.

All usage in whatever dialect, can be classified, as we pointed out in Unit I, into three levels -- formal, general, and unacceptable -- that function in phonology, morphology, and meaning. Here we apply the classification to our widest actuality of usage -- American Standard dialect.

Formal usage is a rather limited one in our day. It is best represented by the language of legal, religious, fraternal, ceremonial and contractual occasions and documents. Unacceptable usage is generally that which will not appear in the mass media of communication. Even here there is a wide range between the media in public places—oftened darkened theatre, movie, nightclub -- and those that we share at the same time in the normally lighted home -- radio and television. General usage is the great middle ground between Formal and Unacceptable which in our day often combines the publicly serious with the homespun humorous in close combination. A presidential address, a newspaper editorial, and a testimonial speech can serve as three examples of such a combination.

EXERCISES

1. (R) Look up the following words in the dictionary. What about their use today? cars, horsecar, beau, doily, antimacassar.

2. Consider the following two lists of words pertaining to American politics and to the automobile and its use, and decide whether each is a new word or an old word with new meaning. Also identify those which are compounds.

   (1) caucus, primary, write-in vote, absentee ballot, referendum, recall
   Can you add any other words characteristic of American politics?

   (2) automobile, windshield wiper, dashboard, glove compartment, gas gauge, accelerator, fender, bumper, parking, stop light, traffic lane, exchange, ramp, gaseteria, rest room, motel.
   Add as many others as you can.

3. (R) What backgrounds gave us the following words, according to your dictionary: muskrat, parachute, cole slaw, pot cheese, chipmunk, prairie fire, liverwurst, ranch house, car rodeo, Santa Claus, woodchuck, hamburger, slugfest, shopping plaza, sleigh bells, waffles.

The Development of English as a World Language

2.9. The 18th Century Emphasis on Reason and Classic Precedent. The post-Reformation years were for people years of great religious concern. Each breakaway from an existing Christian church -- Anglicanism, Lutheranism and Calvinism from Catholicism; Puritanism from Anglicanism; Baptists from Puritans, and the like -- arose from reasoning that questioned and disproved parent beliefs and developed and substantiated its own. The process itself acquired primary importance and emphasis. This emphasis had its foundation not only in religious reasoning, but also in the ordering of scientific knowledge beginning with Bacon and eventuating in Newton's discovery of the laws of matter and gravitation. The notion that all physical things run strictly according to natural law led to the rather logical feeling that non-physical things also run by natural laws, laws of the intangible world of mind and spirit -- the laws of reason.

Similarly, language was thought to function by natural laws, a fact that led to such systematic language studies as those of Grimm and Verner and to a strong emphasis on correctness of expression. Emphasis in language usage was placed on balanced structure; on reasonableness of attitude and tone; on precision of word choice; and on borrowings from the "learned languages", Latin and Greek, for abstract thought, art and refined social life. There was a concerted attempt to use and to regulate the "semi-barbaric English tongue" in the patterns of the "ideal" languages of Classic antiquity. In fact, so general was the concern for the study and improvement of English that the "rules" laid down by the lexicographers and grammarians of the 18th century became the language standards for the next 150 years.

It might be thought that 18th century interest was so high in language study that the practice of writing became secondary. Quite the contrary. The extremely skilled poetical workmanship in the predominant form of the heroic couplet was matched in prose by increased directness; proportion and balance between the whole composition and its parts; perfecting of parallelism, climax and anti-climax in sentence structure; and cultivation of a restrained, reasonable, tone. The models were English: Dryden earlier, then Johnson, Goldsmith, Addison, Steele, Burke. Then an entire generation of Americans, busy with nation-founding, adapted the same style to as fine a single collection of political writings as can be found anywhere. The names are quite familiar: Henry, Dickinson, Hamilton, Madison, Jefferson, Adams, Franklin, Paine and Freneau.

Franklin can serve as the typical American example because he could concoct the most polished of satires, pen the clearest of scientific observations, and also write an autobiography so direct and even-tempered that even his greatest crises are caught with almost matter-of-fact reasonableness. The prose style of all these writers was based on that of the great Greek and Latin writers, as were their principles of rhetoric. The result was the modern English sentence, a truly collaborative achievement of both British and American writers. Thus the century that gave us grammar by rule gave us also a prose style whose tight structure and relaxed tone can serve us well as pattern for improvement of our own writing.

EXERCISES

1. Study the following brief excerpts from Benjamin Franklin, Thomas Paine, and Thomas Jefferson. Indicate where and how they show the 18th century characteristics of language discussed above.

(Viking Survey, pp. 291, 326-327, 349)

Then I made myself as tidy as I could and went to Andrew Bradford the printer's. I found in the shop the old man his father, whom I had seen at New York, and who, traveling on horseback, had got to Philadelphia before me. He introduced me to his son, who received me civilly, gave me a breakfast, but told me he did not at present want a hand, being lately supplied with one; but there was another printer in town, lately set up, one Keimer, who perhaps might employ me; if not, I should be welcome to lodge at his house, and he would give me a little work to do now and then till fuller business should offer.

Colonial and Federal to 1800
Viking Press, page 291
by Benjamin Franklin from
The Autobiography

These are the times that try men's souls. The summer soldier and the sunshine patriot will, in this crisis, shrink from the service of his country; but he that stands it now deserves the love and thanks of man and woman. Tyranny, like hell, is not easily conquered; yet we have this consolation with us, that the harder the conflict, the more glorious the triumph. What we obtain too cheap, we esteem too lightly: it is dearness only that gives everything its value. Heaven knows how to put a proper price upon its goods; and it would be strange indeed if so celestial an article as FREEDOM should not be highly rated.

Colonial and Federal to 1800
Viking Press, pp. 326-327
by Thomas Paine
from The Crisis (No. 1)

We hold these truths to be self-evident: that all men are created equal; that they are endowed by their creater with certain unalienable rights; that among these are life, liberty, and the pursuit of happiness; that to secure these rights, governments are instituted among men, deriving their just powers from the consent of the governed; that whenever any form of government becomes destructive of these ends, it is the right of the people to alter or abolish it, and to institute new government, laying its foundations on such principles and organizing its powers in such form as to them seem most likely to effect their safety and happiness.

Colonial and Federal to 1800
Viking Press, p. 349
by Thomas Jefferson
from Declaration of the United States

2. An interesting little essay on language, particularly American English, was included by James Fenimore Cooper in his The American Democrat (1838). Two excerpts follow. Are these at all relevant to today's American English? Discuss.

While it is true that the great body of the American people use their language more correctly than the mass of any other considerable nation, it is equally true that a smaller proportion than common attain to elegance in this accomplishment, especially in speech. Contrary to the general law in such matters, the women of the country have a less agreeable utterance than the men, a defect that great care should be taken to rememdy, as the nursery is the birthplace of so many of our habits.

The American Democrat
James Fenimore Cooper
Vintage Books, Inc. p. 116

The love of turgid expressions is gaining ground and ought to be corrected. One of the most certain evidences of a man of high breeding, is his simplicity of speech; a simplicity that is equally removed from vulgarity and exaggeration. He calls a spade, a "spade". His enunciation, while clear, deliberate and dignified, is totally without strut, showing his familiarity with the world, and, in some degree, reflecting the qualities of his mind, which is polished without being addicted to sentimentalism, or any other bloated feeling. He never calls his wife, "his lady", but "his wife", and he is not afraid of lessening the dignity of the human race, by styling the most elevated and refined of his fellow creatures, "men and women." He does not say, in speaking of a dance, that "the attire of the ladies was exceedingly elegant and peculiarly becoming at the late assembly," but that"the women were well dressed at the

> last ball;" nor is he apt to remark, "that the Rev. Mr. G______ gave us an elegant and searching discourse the past sabbath," but, that "the parson preached a good sermon last Sunday."

The American Democrat
James Fenimore Cooper
Vintage Books, Inc., p.121

2.10. 19th Century Expansion. This century offers excellent evidence that patterns set in motion tend to continue and even to have analogical effects.

The 19th century saw the emergence of modern science and technology, industrialization, communication, and urbanization. Let us see how these affected English language tendencies we have noted. All of them created many virtually new areas of specialization: oil refining, automobiles, chemistry, telegraphy, telephone, daily newspaper, mass magazines, to name but a varied few. Each of these fields added a vocabulary of its own, as well as adding new meanings for existing words. These processes also continued any melting pot tendencies of the English language.

All the previous structural trends continued through the century. Two forms of these have been practiced especially frequently by Americans. These are verb-adverb combinations and compound nouns. The first includes such combinations as rub off on, dig in, shape up, follow through, run down. The second, making compounds, represented an easy way for Americans to name plants, animals and products new to them: bull snake, ground squirrel, catbird, cottonwood, log cabin. Some remain as two words, while others have become one. Can you think of any hyphenated examples? Once the general tendency was from two words, to hyphenated word, to one word. This trend has lessened greatly in recent years, as we need so many new words and so many new uses for old words that we do not tie them up permanently, but leave them free for any and all new combinations.

The American melting pot of both city and country tended to bring together people of various dialects and so continued the earlier trend of making the dialects less extreme in differences than was true in England. The very nature of American English as a whole continued to vary more from the British mother tongue, as new fields like railroading, manufacturing, agriculture, and native politics and sports developed purely American vocabularies or somewhat different vocabularies for the same fields.

We should remind ourselves that, simply because American English early began to differ from British English, it is not always newer in its uses. Hundreds of words have been found to survive in America, though they have gone out of use in Britain. Look up examples of such given in Albert H. Marckwardt's American English, pp. 59-80.

Certain aspects of American pronunciation are also due to this "colonial lag," as Professor Marckwardt terms it. The general American pronunciation of the a in fast, path, half, dance and others is like that in cat. In British English the a in these is pronounced like that in our father. This represents, in short, America's retention of a pronunciation exported to her, while the British home product underwent change. A second instance of such American retention is in the pronunciation of r. In British English this has disappeared except before vowels. In American English it continues, though with lessened force in some dialects like New England, New York, and Southern.

A third instance is in words like got, top, hot, stock, pronounced generally in American English as parallel to chop and copper. These have become pronounced with partly rounded lips in British English, as is true often in New England.

Still another instance lies in the British dropping of the third syllable in certain words: secretary, dictionary, necessary. The a is silent. In American pronunciation, on the contrary, even when the strongest stress falls on a syllable other than the first, the a is pronounced: elementary (educational use), contemporary, extraordinary.

These four are the major differences between British and American pronunciation, all due to our retaining of the imported version (16th-17th century), while the British one gradually changed.

But we need to look westward as well as eastward. With the coming of railroads to centers as far west as Chicago and St. Louis (see our transportation map), these became jumping-off points for the West. This time the territorial expanse was vaster, the possibility of Indian attack stronger, and the mountains eventually to be crossed far higher and more rugged. Large wagon trains were a necessity for survival. Therefore, smaller groups banded together into larger ones, including varied language and dialect groups. Thus not only were dialects exposed to one another, but also the common bond of communication between different nationality groups was English. This was true as well in the settlements, whether rural or village. Each was dependent on all for help against attack, famine, disease, weather, crime.

The routes were even fewer: the southwestern, the western one (taken later by the first transcontinental railway), and the northwestern one (found by the Lewis and Clark expedition), the latter not nearly so popular as the others. Dialect mixing in this fourth stage was bound to occur even more pronouncedly than before.

The prairie melting pot has been caught by such writers as Cooper, Cather, Rolvaag, and Garland. Cooper with his The Prairie was the first. This book has a quite improbable ruse for bringing together an English Anglican Cavalry officer, a group of Northern Irish Bible-reading squatters, a traveling preacher, a Spanish Catholic heroine from Louisiana. These and assorted others symbolize the American mixture of nationality, religious and language backgrounds who must work out their survival together or perish separately. The novels of Cather, Rolvaag, and Garland later treated the same situation more realistically for the settlements of Nebraska, the Dakotas, and Minnesota and Iowa, respectively. The Far West was similarly portrayed in the fiction of Bret Harte and Mark Twain. In all instances one finds the attempt to distinguish between backgrounds in the dialects spoken by the characters. For instance, Mark Twain points out in a preface to Huckleberry Finn that he has carefully distinguished among four dialects:

EXPLANATORY

> In this book a number of dialects are used, to wit: the Missouri negro dialect; the extremist form of the backwoods Southwestern dialect; the ordinary "Pike County" dialect; and four modified varieties of this last. The shadings have not been done in a haphazard fashion, or by guesswork; but painstakingly, and with the trustworthy guidance and support of personal familiarity with these several forms of speech.
>
> I make this explanation for the reason that without it many readers would suppose that all these characters were trying to talk alike and not succeeding.
>
> The Author

The Adventures of Huckleberry Finn
by Mark Twain
Harper and Bros.

The westward expansion of American English is but one specific instance -- though of course one very close to us -- of the general expansion of English as Britain expanded to the only frontier available to it -- that overseas, of which the settlement of America was a substantial part.

First of all, we might wonder at the fact that the dialects of "tight little island" Britain persisted in greater separation than those of America. The answer lies surely in a principle of language change we already know well: the basic patterns in which a language develops tends to remain reasonably constant! This parallels the learning of a language by a child -- his formative language patterns will remain a part of him all his life. Similarly, the early separating and mixing patterns, respectively, of British and American English have continued down to our time.

The earliest of the export dialects of Britain was Scottish. The characteristics of the northern dialect became so individually developed with a strong Gaelic flavoring in the north that gradually it became a distinct dialect: so much so that some linguists think of it as a different language. But British English is today's official dialect in Scotland, a fact due to the Reformation, the accession of James VI as King James I of England (1603), and the Act of Union (1707). The last of the predominant ly Scottish dialect poets was Robert Burns. Since then the dialect has steadily declined as a standard, even in the arts. In fact, only last year the great Scottish Dictionary, in financial straits for years, had to be at least temporarily abandoned for lack of funds.

Irish English went through a similar development. Gaelic was gradually supplanted by English as standard, especially during the seventeenth century, with a Celtic lilt that most hearers find very melodious. In the twentieth century there has been a deliberate effort to re-establish Gaelic as the language of the Irish Free State by teaching it in the schools. The attempt has not yet succeeded, bearing out what we have learned about language: it develops naturally and to develop it artificially is exceedingly difficult, if not impossible. It is Irish English that has become one of the chief dialect elements in American English.

The settlement of Australia in its earlier stages was by prisoners from Britain and lower class Britons who wanted to better their station. The generous sprinkling of London Cockney dialect among these settlers and the animals and plant life unique to Australia have given Australian English a flavor all its own.

English followed Dutch in South Africa, as it had in New York City. But the Dutch were proportionately more numerous in South Africa. Consequently, South African English is strongly flavored with Dutch words. It has had also a substantial number of African (native) borrowings, as well as the influence of generations of Scottish school teachers.

The English of Canada, on the other hand, has been molded predominantly by American English, Northern especially. Consequently, Canadian English is in essence a dialect of American English. Most Canadians say schedule with sch like sh in shall instead of sk as in skill; they also say the diphthong in house a little differently from most Americans. But such rather rare exceptions only prove how similar Canadian and American English are.

The English of India shows its dialect in its take-over of certain necessary words from the main native languages because there are no actual equivalents in Britain (plants, animals, customs, religious beliefs, etc.). Otherwise, Indian English is that used by the British who ruled India for so long as well as by Indians who attended British universities.

We have taken a quick look at some of the main extensions of English throughout the British Empire. How really far flung and varied these were can be seen from a list of some of the other Empire colonies:

In Europe - Gibraltar, Malta, Aegean Islands, etc.
In Africa - Egypt, Sudan, Tanganyika, Rhodesia, etc.
In Asia - Malay States, Hong Kong

In the Americas - British Guiana, Trinidad, Bahama
Islands, etc.
In Australasia - British New Guinea, New Zealand

The Empire spread of English is considerably firmer than the spread of Greek or Latin through the empires of Alexander and the Roman Caesars. Conquest is but one reason. Another lies in the gradual development of major colonies into Commonwealths with a constantly growing autonomy. A third reason is to be found in the multitude of laguages found in some colonies, making English not only the one mutually shared official language, but the necessary continuation of English as official language even after Commonwealths and Colonies have become independent. Thus India has not been able to agree on a single native language, so English remains the official language. This is equally true of some of the new African nations embracing various tribes and languages.

EXERCISES

1. Identify, with the help of dictionaries and any personal connections, the kind of English to which each word in the following lists belongs (some may belong to more than one kind):

movie
film
cinema
bioscope

canteen
pub
snug
bar

dorp
village
town

veld
prairie

2. Give some of the meanings various kinds of English have for the following:

station
camp
store

3. Using your dictionary and any other source match the following lists of words.

American	British
tv	petrol
hood	pram
elevator	lift
gas	bonnet
rare	bobby
radio	underdone
truck	telly
cop	lorry
baby carriage	wireless

4

2.11. The 20th Century. The current century continued all the trends we have been considering, accelerating many. Thus the increased knowledge, specialization, and pace of contemporary life are reflected in the many additional field vocabularies, of which aviation, electronics, television, nuclear physics, biochemistry, stereo, and radiology are but a smattering. Since scientific knowledge has approximately doubled twice within the last 25 years, you can see that the need for vocabulary expansion has been like nothing before in language history.

One structural development has been tremendously accelerated in our day, particularly out of the need to coin new terms in the sciences. You may have read that pharmaceutical companies now feed the components of new drugs into computers to arrive at possible names for them. These must be names that will not overlap with others and will yet be clearly indicative of the product's makeup. This procedure is also used widely in the technological fields. The resulting terms are often long, difficult, and quite intermingled in the parts of speech used. Here are some examples from recent advertisements in The Scientific American:

Collins Kineplex high-speed data transmission systems
Ohio Semiconductors' Hall Effect Current Transducers
a four-point angular contact ball bearing
total fast neutron dose
automatic ambient-temperature three-channel liquid
scintillation spectrometer
in put; out put; through put

The tendency has naturally spread more extensively than ever before into our everyday English as well. Here is a sample drawn from a restaurant menu: Broiled Fresh Alaska Red King Salmon. "Escapade, the magnificent Philip L. Rhodes designed seventy-two foot yawl" was taken from a boating magazine. A sports news item speaks of "the list of unbeaten untied major small college basketball teams." One of the longest such, from Britain, happily carries quotation marks, though most do not: the familiar "John dedicates this number to Mary Howard of Barnet, Hertfordshire" radio valentines.

Add other random examples:

on the go traffic
on the grow families
a real here is something you ought to do quality
It's a me saver.
Give me a for instance

In every illustration the easy interchangeability of the parts of speech is quite apparent. Identify as many of the words in the examples as you can. Note too that signals which help show what words belong together -- hyphens and quotes -- are often missing. Can you see that if your teacher asks you to identify the parts of speech in such structures, you might have quite a time, unless you have several clues instead of a single definition to help you: for example, that a noun not only names a person, place or thing, but also forms a plural and a possessive, appears consistently in certain positions in our sentences, and often has characteristic suffixes.

A second great 20th century influence is the direct relationship between the pace of our lives, the speed of our communication media,and the pace of our own individual communication process. We are used to functioning in a multi-noise context, accustomed to getting and sending our messages through and over other sounds, used to interruptions and doing several things at the same time. Our individual communication make-up and process has become geared to the variety and simultaneity of stimuli that compete for our attention and demand our responses. Among the speed-ups is that of the flow of speech. A stenographer who served six presidents said that each succeeding one dictated faster. We are not electing only fast-talking presidents; their speech pace is representative of general practice. Faster talking necessarily means less time per syllable and sound.

One result has been to make all the vowels of unstressed syllables sound quite alike. This sound is shown by the symbol ə, called a schwa. It made its first American dictionary appearance in 1949 and is already by far the most frequently used symbol in the dictionary. The trend is not new. The dictionaries have caught up with the trend in pronunciation; but the trend has also hit the top of the speedometer. You see that the more vowels sound alike, the harder it is to hear the distinction between them as an aid to spelling.

Somewhat related to this matter of speech pace is the contemporary trend to informality. It began as an emphasis on being natural: to converse, discuss and give speeches as one naturally talks and not according to some elocution system. But this in itself has been part of a larger trend to informality. Language is a part of behavior like dress, manners, customs. When these become more familiar, so does language.

When there are fewer dress-up affairs and even ordinary dinners, and more cook-outs, picnics and family room gatherings, the dress and language follow suit. This holds not merely for ordinary people but also for that educated minority we spoke of earlier. Meanwhile, that minority has grown substantially here in a land dedicated to universal education for universal citizenship. That minority, greatly augmented, also issues magazines, makes state speeches, addresses formal dinners, all in a language of taste that includes informal anecdotes and allusions as well as literary prose, often used effectively together.

That is why, as we have seen, we tend to speak of language use that is *appropriate* to a given situation rather than generally *proper* or *correct*. That is also why the designations *formal* and *unacceptable* cover far fewer instances of usage than ever before and why there is such a vast middle-ground called, appropriately, general.

Meanwhile, what of the spread of English as a world language? We have noted that the successor of the British Empire, the British Commonwealth of Nations, comprises a worldwide group of nations for whom the official language is English. The 20th century also brought the emergence of the United States into world affairs. Its international influence in trade, in world conflict (World Wars I and II and others), in the United Nations, in alliances and in foreign aid have carried American English to even the remoter parts of every continent.

What is the current state of English, that is, the sum total of all English dialects? Structurally, it is quite set, with the direction toward even greater simplicity in inflection and word order continuing in such things as the reduction of strong verbs; the almost exclusive use of -s and -es as plural; the reduction in use of the possessive by substituting of (boy's,of the boy); the consequent tightening of the word order pattern, so that 94% of our discourse is already done in six simple patterns or combinations of them.

The sound system of English seems relatively set in its consonants and in its short vowels, as we have noted. The tendency to increased regularity of stress moving forward in words,and so of more sound-alike unstressed vowels (schwa), seems likely to continue as our speaking pace continues brisk or more so. The diphthongs have systematically continued to shift in formation, and so in sound. Since we have seen this to be one of formation with the tongue further forward and upward, where can it end?

Also to be kept in mind are our electronic media of communication: film; radio (various wave length); television (UHF and VHF); and recording (record and tape). These have shifted our language emphasis from one on print and silent reading to one on viewing and hearing. In other words, oral language has again become central, somewhat as it was before printing. And we remind ourselves that oral language changes more and more quickly than written language. All this surely points to possibly rapid changes in all pronunciation.

The dialect status of English tends still toward less distinctiveness. This is true of British English as well as American. The universality of communications media continue to press for a common dialect ground, as do our frequent travels and changes of residence. A curious footnote comes currently from Britain,where general dialect use is actually increasing. It seems that a neutral language is fine for a voice over radio, but not individual enough for a personality seen intimately on television.

The English vocabulary continues to expand tremendously, but as much by coinage and re-formation as by borrowing. The latter goes on with complete adaptation to our own structure. The former includes adding new meanings to the same words, compounding, and the flexible manipulation of prefixes, suffixes, and word stems.

All of these characteristics may well favor the cause of English as possibly the world language of the near future. Discuss why each characteristic does or does not lend itself to such a conclusion.

Two other characteristics of English seem to represent handicaps for its assuming world leadership. One is the great increase in idiomatic expressions, most prevalent in verb-adverb combinations and prepositional phrases. Can you think of examples that might strike a foreigner as odd and therefore difficult?

The second handicap to anyone learning English is, of course, our spelling system. It is, however, sometimes easier for foreigners than for natives, simply because in borrowed words the spelling is often similar to, or even identical with, the word in the language from which it was borrowed, our pronunciation notwithstanding: chauffeur, quahog, hombre, zwieback, skoal.

Other points that favor the spread of English in a world sense are (1) its numerical strength; (2) its being the language of two great powers, the United States and the British Commonwealth; (3) its vocabulary being made up of so many borrowings from other languages, especially Germanic and Romance; (4) its ever-growing strength as a second language, and even as official language in countries whose language elements are so diverse that they cannot agree on a national language (India, the Philippines, Guiana, etc.).

Finally, of what importance is it really what language becomes predominant? There must be millions who could not care less. But these are without doubt more than matched by millions who care intensely. Who? Why? Should we?

In a sense, the importance lies in the fact that language and ideology do go together. This is apparent in the dual attitude toward English in emergent nations: it is attacked as the language of colonialism, yet it is also recognized as the language of freedom. Of perhaps even greater importance are totalitarian attempts (Nazi and Communist) to control people's thinking by (1) restricting the words in dictionaries generally available; and (2) prescribing the meanings that can be listed for the words included. The idea is to remove much of the stimulus to independent thought by rigorously controlling the primary medium for thinking -- language. A free language is open to misuse by the irresponsible and the unethical, but it is always open to examination and to free inquiry by all.

This historical survey of the English language is but a bird's-eye view. Hopefully it will stimulate additional reading on your part. Most of all, it is meant to give you a solid notion of the way in which a language, and English most particularly, comes into being and develops, with the main patterns changing systematically and gradually, not helter-skelter to fit any one's special idea of what it ought to be. A language in its functioning simply will not permit anyone to tell it either "anything goes" or "this is the way you must go." We ascertain the state of that language at a given time and see how it got that way; only then will we be able to say something about its future.

EXERCISES

1. (R) Here are some of our World War II borrowings. Look them up in the dictionary. Which seem to be translations rather than direct carryovers? Which do you hear or see in the day's news?

   quisling
   breakthrough
   retreat in depth
   collaborationist
   blitzkrieg
   elite guard
   strategic withdrawal
   Anzacs
   panzer
   pocket battleship

2. See how many meanings you can give for two of the following without a dictionary, including compounds. Then turn to your dictionary and add others. Also check if you have listed slang words that are not in the dictionary. For one of them use an unabridged dictionary, if your school has one.

   cross bit ride ball slide run

3. (R) If your library has a dictionary of Americanisms look up the following. To what period do they belong?

   23 skidoo
   hooligan
   straighten up and fly right

   Do the older members and friends of your family use any slang expressions that you are not used to? Which of the slang expressions you use do you think will die, which stay alive, and why?

4. Here are two exercises to show word order governs meaning in modern English:

   (1) Show, by underlining each word in turn, the various oral emphases this sentence can be given: We played the Beavers last week.

(2) Place the word only in as many places as possible in this sentence to indicate the possible changes in meaning and emphasis:

She was only a child.

The Development of the Study of English

2.12. Pre-18th Century. The study of a language always follows a longtime general use of that language. Thus when a full grammar of Sanskrit appeared in about 500 B.C. that language must already have had a lengthy development and use. English, as we have seen, emerged into what we call modern English between the time of Chaucer and Shakespeare, roughly between 1400 and 1600 A.D. It was in the 17th century, after the language had been developing for over a thousand years that the study of English really had its beginning.

One of the earliest reasons for study of the English language lay in the need for a standard orthography. What is that? Another reason lay in the rhetoric of the time, which was often overly wordy , abstract and ornate, especially in the mouths of courtiers and would-be courtiers addressing patron nobles. As a result, essays for a more direct speech and writing began to appear. Guides for discourse were developed in the form of lists of difficult words and their meanings, including,of course, foreign borrowings. Such lists by Cawdrey, Bullokar, Cockeram, Blount and Phillips (1604-1658) were the forerunners of what kind of modern books, do you suppose? So we had books dealing with the pronunciation, spelling and meaning of words. What aspect of language that we study regularly in school was not included? Grammar, of course; this aspect began to be a concern later in the 17th century and particularly in the 18th century, the latter an era known in literary annals as the Neo-Classic Period and in historical circles as the Age of Reason.

2.13. 18th Century. We have already noted the discoveries of men like Grimm and Verner -- namely, that languages,too,change in pattern, not haphazardly. Therefore,to study the workings of language best and to get at how English works best is to relate it to the great polished languages of antiquity, Greek and Latin, both Indo-European like our own. The aims of the 18th century students of English were: (1) to discover the system of rules (laws) through which it functions, by applying to its system or grammar what had already been established for Greek and Latin, and, to a lesser degree,for Italian and French; (2) to refine the language where necessary and set standards for it to counteract the defects which had supposedly crept into it; (3) to fix the language in the form proper to it. Where precedent for a rule could no longer be ascertained, reason would be the guide. The means to these ends were a National Academy as guardian of the language, a dictionary, and a grammar. All of these had already been set in motion in Italy and France. In England there was decided objection to an Academy, especially from Dr. Samuel Johnson; he and others felt that no language could be permanently fixed, and that Greek and Latin, which had stayed "pure" longest, had done so without benefit of any academy. An academy was never established.

Dr. Johnson, after but seven years of work, published A Dictionary of the Language in 1755. The grammar was essayed by William Loughton (1734), Joseph Priestley(1761), and Dr. Robert Lowth (1762), eventually a Bishop of London. Famed scientist Priestley recognized that free usage by free people can not and will not be bound solely by precedent, reason, and prescribed rule, and thatEnglish had developed independently of Latin and Greek. But this is not the view that prevailed. The works of Johnson and Lowth became arbiters, the latter's grammar going through over twenty editions and directly influencing many other grammars as well. Thus the first grammars that prevailed in our schools and colleges were those that rigorously prescribed rules for everything. Often what was prescribed was adopted by analogy to Greek and Latin or even out of the personal taste (reasonableness rather than reason) of the particular grammarian or lexicographer. Interestingly, these general prescriptive outlines, despite individual variations, endured into the twentieth century, especially as part of school textbooks.

The earliest figure in America to pursue such language study was Noah Webster. As a lawyer turned teacher, he tried to do something about the shortage of English texts occasioned by the Revolutionary War. He wrote a spelling book, a grammar, and a reader. The speller was a phenomenal best seller, going through edition after edition for over a hundred years. The income from it made possible his continued study of American, as distinct from British, English. The speller reflected his bent toward simplified American spelling, which he did not indulge as far as he had a mind to because of the admonition against it by Benjamin Franklin. His dictionary (2 vols., 1828) was called An American Dictionary of the English Language. This was but the culmination of his linguistic nationalism, he having from the very first urged a thoroughly American pronunciation, spelling and usage as a unifying factor for the colonies, and as essential to the development of an American literature. Webster seems to have had greater success than the British philologists who paralleled him in their concepts of language change, but that is surely only because American English began almost at once to vary from the British. Conversely, in fact, most English (and many cultured Americans) looked down on American speech as representative of America's geneal cultural barbarity. This attitude has persisted and has a few adherents even to this day.

EXERCISES (Dictionary)

(R)The following quotations give the views of Dr. Samuel Johnson on language as he made them in the Preface to his (our first comprehensive) dictionary (1755). Look up what the preface of your own dictionary says about each of these aspects, copying down the sentences that summarize each. Then compare the two for likenesses and differences. Your instructor will decide whether this is to be an individual or group project.

1. The Function of the Dictionary Maker:
"Every language has its anomalies, which ...must be tolerated among the imprefections of human things, and which we require only to be registered, that they may not be increased, and ascertained, that they may not be confounded: but every language has likewise its improprieties and absurdities, which it is the duty of the lexicographer to correct or proscribe."
"... to me, who do not form, but register the language; who do not teach men how they should think, but how they have hitherto expressed their thoughts."

2. Spelling:
"... some (words) still continue to be variously written, as authors differ in their care or skill: of these it was proper to inquire the true orthography, which I have always considered as depending on their derivation, and have therefore referred to their original languages:..."

3. Etymology:
"It is of great importante, in examining the general fabric of a language, to trace one word from another, by noting the usual modes of derivation and inflection; ..."

4. Grammar:
"The words, thus selected and disposed, are grammatically considered; they are referred to the different parts of speech; traced, when they are irregularly inflected, through their various terminations; and illustrated by observations ... necessary to the elucidation of our language, ..."

5. Meaning:
"To explain, requires the use of terms less abstruse than that which is to be explained, and such terms cannot always be found; ... for the easiest word, whatever it be, can never be translated into one more easy.
"... I have endeavoured frequently to join a Teutonick and Roman interpretation, as to CHEER, to gladden, or exhilarate, that every learner of English may be assisted by his own tongue."

6. Usage Examples:
"My purpose was to admit no testimony of living authors, that I might not be misled by partiality, ... I have studiously endeavoured to collect examples and authorities from the writers before the restoration (1660) ...I have fixed Sidney's work (Sir Philip Sidney, 1554-1586) for the boundary, beyond which I make few excursions."
"Some of the examples have been taken from writers who were never mentioned as masters of elegance or models of style; but words must be sought where they are used; and in what pages, eminent for purity, can terms of manufacture or agriculture be found?"

7. Words Included:
"... to COLLECT the WORDS of our language was a task of greater difficulty (than the other concerns above); the deficiency of dictionaries was immediately apparent; and when they were exhausted, what was yet wanting, must be sought by fortuitous and unguided excursions into books, and gleaned as industry should find, or chance should offer it, in the boundless chaos of a living speech."
"Many terms appropriate to particular occupations, though necessary and significant, are undoubtedly omitted; ..."

2.14. Post-18th Century. The study of the English language continued to be influenced primarily by the 18th century philologists and their followers. Grammar and usage as taught in the schools was prescriptive, with a single standard of correctness and with permissiveness limited to very informal occasions.

This century's great monument of English language study is the comprehensive historical dictionary which includes earliest found use of every word in English, and all changes in form and meaning, known as either the NED (New English Dictionary on Historical Principles) or the OED (Oxford English Dictionary). Years of widespread research, including the necessary publication of 150 volumes of Old and Middle English manuscripts, began in 1858 and culminated in the gradual appearance of the 10 volumes between 1884 and 1928. A supplementary volume appeared in 1933. It is, as Professor Baugh has said, "the greatest dictionary of any language in the world." And it has, of course, influenced all later lexicography, particularly that of English.

When we turn now to the language study of this century, we will not be surprised to find that it adapts to the social conditions just discussed. A first result is greater concern for Americanisms and their status in our speech and writing. After George P. Krapp's The English Language in America (2 vols., 1925), came The Dictionary of American English under editors Sir William Craigie (who had received his knighthood for his work on the Oxford English Dictionary) and James R. Hulbert (4 vols., 1938-1944). Then came the great linguists of recent times, most still living, whose work will be treated in another unit. Here we shall speak of but one practical result, one that touches all our lives, a new breed of desk dictionaries.

Linguist and lexicographer Clarence Barnhart edited the first of these, The American College Dictionary, 1949. Later he collaborated with reading-language expert and psychologist Edward L. Thorndike to produce the Thorndike-Barnhart school dictionaries by levels. Webster's New World Dictionary came along concurrently, and Merriam-Webster's Seventh Collegiate Dictionary followed last year.

How did the process of "making" these differ from that of previous smaller dictionaries? First, entries had been taken from the unabridged dictionary. This tended sometimes to miss popular usage, as well as new uses. The new approach is to take the words most frequently used and thus include very recent ones. Second, pronunciation had been given for the New England dialect, one not spoken by most Americans. The newer dictionaries eliminated the distinctions no longer observed generally and so reduced the diacritical markings by about a third. They used what is called Inland Northern, which, despite dialect variations, is the general dialect pattern used by a majority of the people in the country.

A third category of changes applied to meanings. In the new versions any form of the word defined is kept out of the definitions. All meanings are worded in direct, readily understandable prose. The meanings are listed in order of frequency of use, and the etymologies of words tend to list the current usage first. A fourth change governs usage labels. The unwieldy, and really untenable, 4-5 level scale has been simplified to include fewer levels and more varieties. Still another kind of change came in the attitude toward punctuation. The earlier "closed" punctuation, done primarily by rule, was replaced by the notion of "open" punctuation, the use of as little inner punctuation as necessary for clear understanding.

The shift of all major desk dictionaries to a similar linguistic outlook suggests that our usage has indeed been changing radically. It also suggests that the emphasis of the study of the English language has been changing in parallel fashion, as evidenced here in dictionaries and later in the treatment of sound and structure in the new grammars.

The 18th century quarrel over whether language ought to be allowed to change unimpeded is with us today, still in fullest force. Today, as then, those who think that any language can be kept from changing with the changes in society are an unimportant few; equally few are those who think that anything goes in language use. The real argument now, as it was then, is between those who think standards are in the hands of people generally and those who think the educated minority has the responsibility to ascertain and set such standards. For some the difference consists essentially in who is the deciding minority. The same conflict has centered most recently on the third edition of the Merriam-Webster International Dictionary.

EXERCISE (Dictionary)

Consult a standard desk dictionary of the 1960's and one published before 1940 and compare them from the following aspects:

1. number of diacritical markings in the Introduction and in the table on each page.
2. treatment of the pronunciation of:

   aunt
   forehead
   employment
   merry/marry/Mary
   creek
   sorry

3. Check the wording of the definitions of the above words for simplicity.
4. What varieties and levels are listed in the Introduction of each.

2.15. The Uses of the Study of English. Our heading means the study of the English language, not the school subject English. You sensed this automatically from the context in which we have been working, namely, a consideration of the English Language. We bring up this obvious fact to remind ourselves that we learn to talk and write in English by imitation and practice. Of what use, then, is the analysis of our language we are undertaking?

Consider this analogy. A man can learn how to repair cars by watching what an expert does. But he will hardly get beyond what he has seen the expert do; he cannot analyze a new repair problem. On the other hand, if he does not merely imitate the expert but also studies automobiles thoroughly, he can generalize from specific experiences and so learn from both his successes and failures. Similarly, if you know how your language really operates, you can add knowledge to imitation in improving your speaking and writing.

For instance, knowing the system of English sounds can help you to read, spell and punctuate better. Why? Because you are then not merely trying to memorize words, spellings and punctuation rules—you are able to see the reason for our patterns of words in sequence, our sentences; for our variations in spelling when the same sound has more than one spelling (age, gauge, pay, raid, prey) and the same letter represents more than one sound (all, tale, pat, another, language); for the functions which various punctuation marks perform in writing that our voice does in speaking.

Second, a study of language is necessary to understand communication in general, as well as the communication process, specific media of communication, and the like.

Third, as educated members of your community who one day can have much to say about your school system if you so wish, all of you should know about your language. Learning about it is a natural part of your general education, even without considering the practical value considered above and their cumulative effect of your future paycheck.

Language was, after all, the first and greatest of the human inventions. While we may marvel that the first man may land on the moon sometime within the next decade, this technological achievement cannot compare with man's invention of language. In the long history of animal life on earth, spanning many millions of years, only humans have invented language, and they did so, according to the best scientific estimates, somewhere between a half and a million years ago. This invention made it possible for man to achieve all of the wonderful things that he has done. To show an extreme example, can you imagine describing how to launch a rocket without using language, either in spoken or written form? Do not think that you could merely rely on mathematics. All of our mathematics and the sciences are based on the logic in our language. And not every language has the kind of system which allows the development of scientific method.

The cause-effect principle is built right into the grammatical structure of our language. Some of the concepts of modern science cannot even be explained in a language which has a structure much different from that of the languages of Europe—English, Russian, German, etc., For instance, most of you probably know that the Japanese have become very competent in some of the sciences, such as physics, and some of the applied areas, such as optics. But the interesting point is that to truly understand modern scientific concepts. the Japanese scientists have first had to study a western European language, usually either English or German. The concepts of modern science are extremely difficult to explain in Japanese or in the other Oriental languages because the idea of viewing reality as cause and effect is not built into their languages, as it is built into ours. Our basic unit of language continuity is the sentence, which also gives us our basic patterns for the scientific method.

Actor/Cause	Acting/Means from Cause to Effect	Acted Upon/ Effect
Man	invented	language
Heat	melts	solids to liquids and liquids to gases

Similarly, another sentence pattern gives us our defining formula:

What is to be defined	Linking	Class(Genus)	What sets this apart (species)
Lunch	is	the meal	between breakfast and dinner
Man	is	the only animal	that talks

Still another use for the study of English comes to those of you who are or will be studying foreign languages. If you know the sound system of your own language, you will have a better basis for comparison. For instance, if you were studying Italian and you wanted to learn to speak it with as little accent as possible, you would have to learn the difference between the way Italians pronounce "t's" and the way you, as a native speaker of English, pronounce them. Ask your teacher, either now or when you are studying the English "t", to demonstrate the difference for you. One reason that people speak other languages with an accent is that nobody has ever pointed out to them the small but important difference between the way a sound is pronounced in one language and the way a similar but different sound is pronounced in another language. A second example of this kind is the difference between an "r" as it is pronounced in English and the way that it is pronounced in many other languages; again, ask your teacher to demonstrate. Basically, the more you know about the way your language functions on all levels, grammatical as well as phonological, the more comparisons you will be able to make in any other language that you study, and the more easily the system of another language, even though it is different, will become apparent and meaningful to you.

ENGLISH LANGUAGE TIME LINE

(Numbers in parentheses indicate selections in historical primer)

Dates	British and Empire English	American English
B.C.		
1200-600	Goidels(Celts) invaded Britain	
c. 500	Indo-European Consonant Shift	
400-200	Brythons (Celts) invaded Britain	
54	Romans invaded Britain	
A.D.		
400-600	Angles, Saxons, and Jutes invaded Britain	
450 - 1150	Period of Old English	
597 - 700	Christianization of Britain	
787-850	Danish forays in Britain	
800-1000	Danes (Norseman, Normans) conquered what is now Normandy (Norman French)	
871 - 899	King Alfred's Reign. Danes (1) given rights in Southeast Britain.	
912	Danes given rights in Normandy	
1014	King Cnut (Dane) conquered Britain	
1066	Battle of Hastings (Norman Conquest)	
1150-1500	Period of Middle English	
1200-1500	Return of English as The Language (2)	
1300 - 1500	Great Vowel Shift (3)	
c. 1340 - 1400	Geoffrey Chaucer (4)	
1400 - 1700	Renaissance Classic Borrowings	
1500 on	Period of Modern English	
1550-1660	Rise and Triumph of Puritanism (5)	
1582 on	Defeat of Spanish Armada. Flowering of English Exploration, settlement, language and literature	
1564-1616	William Shakespeare	
1600 on	Development of Irish English	
1603 - 1707	Emergence of Scottish English	
1604 - 1623	Early Word Books and Dictionaries	
1607 - 1630		English Settlements (6)

Date	British and Empire English	American English
1614 on		Dutch Settlements
1720 on		Scotch-Irish and German settlements
1755	Dr. Johnson's Dictionary (7)	
1761	J. Priestley's Grammar	
1762	R. Lowth's Grammar	
1770 - 1790		American Revolutionary and Constitutional Writers (8)
1783 - 1785		Noah Webster's A Grammatical Institute of the English Languages (speller, grammar, and reader; the speller was re-issued as the American Spelling Book)
1787		Northwest Ordinance, opened western settlement (Southern Scotch-Irish took Appalachin routes)
1803		Louisiana Purchase opened western settlement still further
1820	---------------------- Grimm's Law ----------------------	
1800 on	Empire English (India, South Africa, Canada, Australia New Zealand, etc.	
1806		Noah Webster's Dictionary
1816		John Pickering; first Dictionary of Americanisms
1825		Erie Canal(New Englanders to Michigan,Wisconsin, and Northern Ohio, Indiana, and Illinois.)
1828		Noah Webster's An American Dictionary of the English Language
1848 and 1859		J.R.Bartlett's Dictionary of Americanisms
1875	------------------Verner's Law ------------------	
1884 - 1928	New English Dictionary on Historical Principles (NED) also known as Oxford English Dictionary (OED)	
1889		Americ an Dialect Society founded (9)

Date	British and Empire English	American English
1898 - 1905	*English Dialect Dictionary*	
1905	O. Jespersen's *Growth and Structure of the English Language*	
1925		G.P. Krapp's *The English Language in American*
1938 - 1944		*Dictionary of American English on Historical Principles*
1939 - 1943		*Linguistic Atlas of New England*
1940		C.Fries, *American English Grammar*
1949		(1) *A Word Geography of the Eastern United States* (2) *American College Dictionary*
1951	------------ G.L.Trager and H.L. Smith, The Outline of English Structure	--------------------
		M.Mathews, *A Dictionary of Americanisms on Historical Principles*
1952	------------ C.Fries, The Structure of English	---------------
1961	------------ Webster's *Third New International Dictionary*	---------------

A PRIMER OF PERIOD SELECTIONS IN ENGLISH

	Time	Identification
1.	9th Century	Old English After King Alfred
2.	12th Century	Early East Midland, Middle English
3.	1386	London Dialect, Middle English
4.	c. 1400	Geoffrey Chaucer
5.	1644	English Puritan
6.	1645	American Puritan
7.	18th Century	English (Dr. Johnson)
8.	A18th Century	American (Franklin, Paine, Jefferson, Cooper)
9.	19th Century	American Regional Dialects

1. Hēr cuōm sē here tō Rēadingum on Westseaxe, ond Þæs ymb III niht ridon II eorlas ūp. Þā gemētte hīe ÆÞelwulf aldorman on Englafelda, ond him Þǣr wiÞ gefeaht, ond sige nam. Þæs ymb III niht ÆÞerēd cyning ond Ælfrēd his brōÞur Þǣr micle fierd to Rēadingum gelǣddon, ond wiÞ Þone here gefuhton; ond Þǣr wæs micel wæl geslægen on gehwæÞre hond, on ÆÞelwulf aldormon wearÞ ofslægen; ond Þā Deniscan āhton wælstōwe gewald.

---King Alred's Chronicle

2. Þā fērde Eustace Þē kinges sune tō France and nam Þē kinges suster of France tō wīfe; wēnde tō begæton Normandī ÞǣrÞurph. Oc hē spedde lītel, and be gōde rihte for hē was ān yvel man, for warese hē (cōm hē) dide māre yvel Þanne gōd. Hē rę̄vede Þē lāndes and læide mic(ele gēlde)s on; hē brohte his wīf to Englelānd and dide hire in Þē caste (1 on Can)terberī; gōd wimman scǣ wæs oc scǣ hedde lītel blisse mid him.

--- The Peterborough Chronicle

9. 3. Tō thē mǫǫst nǭble and worthīest lǭrdes, mǫǫst ryghtful and wȳset Cōnseille tō ōw̄re līge Lǭrde thē Kyng, compleynen, if it lȳke tō yōw̄, thē folk of thē Mercerȳe of London as a membre of thē sāme citee, of manȳ wrǭnges subtiles and alsǭ ǭpen oppressiōns ydō tō hem bȳ lǭnge tȳme hēre bifǭre passed. Of which ǫǫn was, whę̄re thē elecciōn of mairaltee is tō bē tō thē frēmen of thē citee bī gōde and paisible avȳs of thē wȳsest and trewest, at ǭ day in thē yę̄re frēlīch, — thę̄re, noughtwithstǭndyng thē sāme frēdam or fraunchīse, Nicholus Brembre wyth his upbę̄rę̄rs propǭsed hym, thē yę̄re next after Jǭhn Northampton mair of thē sāme citee with strǭnge hǭnde as it is ful knowen, and thourgh debāte and strenger partȳe ayeins thē pęęs bifǭre purveyd was chǭsen mair, in destrucciōn of manȳ ryght. For in thē sāme yę̄re thē forsaid Nicholus, withouten nēde, ayein the pęęs māde dȳverse enarmynges bī day and ęke bī nyght, and destruyd thē Kynges trewe lȳges, som with ǭpen slaughtre, somme bī false emprisōnementz; and some fledde thē citee for fęęre, as it is ǭpenlīch knowen.

---From The First Petition to Parliament in English

4. Bifel that, in that sesoun on a day,
In Southwerk at the Tabard as I lay
Redy to wenden on my pilgrymage
To Caunterbury with ful devout corage,
At nyght was come into that hostelrye
Wel nyne and twenty in a compaignye,
Of sondry folk, by aventure yfalle
In felaweshipe, and pilgrymes were they alle,
That toward Caunterbury wolden ryde.
The chambres and the stables weren wyde,
And wel we weren esed atte beste.
And shortly, whan the sonne was to reste,
So hadde I spoken with hem everichon,
That I was of hir felaweshipe anon,
And made forward erly for to ryse,
To take oure wey ther as I yow devyse.

---From the Prologue to The Canterbury Tales

5. I deny not, but that it is of greatest concernment in the Church and Commonwealth, to have a vigilant eye how books demean themselves, as well as men; and thereafter to confine, imprison, and do sharpest justice on them as malefactors. For books are not absolutely dead things, but do contain a potency of life in them to be as active as that soul was whose progeny they are; nay, they do preserve as in a vial the purest efficacy and extraction of that living intellect that bred them. I know they are as lively, and as vigorously productive, as those fabulous dragon's teeth; and being sown up and down, may chance to

9.

5.(continued) spring up armed men. And yet, on the other hand, unless wariness by used, as good almost kill a man as kill a good book; who kills a man kills a reasonable creature, God's image; but he who destroys a good book, kills reason itself, kills the image of God, as it were in the eye. Many a man lives a burden to the earth; but a godd book is the precious life-blood of a master-spirit, embalmed and treasured up on purpose to a life beyond life. 'Tis true, no age can restore a life, whereof perhaps there is no great loss; and revolutions of ages do not oft recover the loss of a rejected truth, for the want of which whole nations fare the worse. We should be wary therefore what persecution we raise against the living labours of public men, how we spill that seasoned life of man preserved and stored up in books; since we see a kind of homicide may be thus committed, sometimes a martyrdom, and if it extend to the whole impression, a kind of massacre, whereof the execution ends not in the slaying of an elemental life, but strikes at the ethereal and fifth essence, the breath of reason itself, slays an immortality rather than a life ....

----From John Milton's Areopagitica

6. For the other point concerning liberty, I observe a great mistake in the country about that. There is a twofold liberty, natural (I mean as our nature is now corrupt) and civil or federal. The first is common to man with beasts and other creatures. By this, man, as he stands in relation to man simply, hath liberty to do what he lists; it is a liberty to evil as well as to good. This liberty is incompatible and inconsistent with authority, and cannot endure the least restraint of the most just authority .... The other kind of liberty I call civil or federal, it may also be termed moral, in reference to the covenant between God and man, in the moral law, and the politic covenants and constitutions, amongst men themselves. This liberty is the proper end and object of authority, and cannot subsist without it; and it is a liberty to that only which is good, just, and honest. This liberty you are to stand for, with the hazard(not only of your goods, but) of your lives, if need be.

---- Governor John Winthrop's Journal

7. See Exercises 1 - 7, pages 36 - 37

8. See Exercises 1-2, pages 22 - 23

9. American Regional Dialects

9a.

THE QUAKER WIDOW

Thee finds me in the garden, Hannah
    — come in! 'Tis kind of thee
To wait until the Friends were gone,
    who came to comfort me:
The still and quiet company a peace
    may give, indeed,
But blessed is the single heart that
    comes to us at need.

Come, sit thee down! Here is the
    bench where Benjamin would sit
On First-day afternoons in spring, and
    watch the swallows flit:
He loves to smell the sprouting box,
    and hear the pleasant bees
Go humming round the lilacs and
    through the apple-trees.

--From "The Quaker Widow", Bayard Taylor
(Middle Atlantic)

9b. "Want to be a school-master, do you? You? Well, what would you do in Flat Crick deestick, I'd like to know? Why, the boys have driv off the last two, and licked the one afore them like blazes. You might teach a summer school, when nothin' but children come. But I 'low it takes a right smart man to be school master in Flat Crick in the winter. They'd pitch you out of doors, sonny, neck and heels, afore Christmas."

---From The Hoosier Schoolmaster,
Edward Eggleston (Indiana)

9c. "Yes, it was at sea; leastways, on a coaster. I got her is a sing'lar kind of way: it was one afternoon we were lying alongside Charlestown bridge, and I heard a young cat screeching real pitiful; and after I looked all round, I see her in the water clutching on to the pier of the bridge, and some little divils of boys were heaving rocks down at her. I got into the schooner's tag-boat, quick, I tell ye, and pushed off for her, 'n she let go just as I got there, 'n I guess you never saw a more miser'ble-looking creatur' than I fished out of the water. Cold weather it was. Her leg was hurt, and her eye, and I though first I'd drop her overboard again, and then I didn't, and I took her aboard the schooner and put her by the stove. I thought she might as well die where it was warm. She eat a little mite of chowder before night, but she was very slim; but next morning, when I went to see if she was dead, she fell to licking my finger, and she did purr away like a dolphin. One of her eyes was out, where a stone had took her, and she never got any use of it, 9c.(continued) but she used to look at you so clever with the other, and she got well of her lame foot after a while. I got to be ter'ble fond of her.

---From Deephaven Cronies, Sarah Orne Jewett
(Down East, Maine)

9d. "There was a feller here once by the name of Jim Smiley, in the winter of '49 — or maybe it was the spring of '50 — I don't recollect exactly, somehow, though what makes me think it was one or the other is because I remember the big flume wasn't finished when he first came to the camp; but anyway, he was the curiousest man about always betting on anything that turned up you ever see, if he could get anybody to bet on the other side; and if he couldn't, he'd change sides. Any way, that suited the other man would suit him — any way just so's he got a bet, he was satisfied."

---From "The Celebrated Jumping Frog of Calaveras County", Mark Twain (California)

9e. "I didn't know whether you wanted me to go quite so far back as that," he said. "But there's no disgrace in having been born, and I was born in the State of Vermont, pretty well up under the Canada line — so well up, in fact, that I came very near being an adoptive citizen; for I was bound to be an American of some sort, from the word Go! That was about — well, let me see! — pretty near sixty years ago: this is '75, and that was '20. Well, say I'm fifty-five years old; and I've lived'em, too; not an hour of waste time about me, anywheres! I was born on a farm, and——"

--- Silas Lapham in The Rise of Silas Lapham,
William Dean Howells (Vermont)

9f. "An' it air a toler'ble for'ard season. Yer wheat looks likely; an' yer gyarden truck air thrivin' powerful. Even that cold spell we-uns hed about the full o' the moon in May ain't done sot it back none, it 'pears like ter me. But, 'cording ter my way o' thinkin', ye hev got chickens enough hyar ter eat off every pea-bloom ez soon ez it opens."

--- From The 'Harnt' That Walks Chilhowee,
C.E.Craddock (Mary N.Murfree)(Tennessee)

9g. "My eye weak, suh, but dee ain'weak nuff fer dat." She shaded her eyes with her fan, and looked at me. Then she rose brickly from her chair. "De Lord he'p my soul!" she exclaimed enthusiastically. "W'y, I know you w'en you little boy. W'at make I ain' know you w'en you big man? My eye weak, suh, but dee ain' weak nuff fer dat. Well, suh, you mus' eat some my ginger-cake. De Lord know you has make way wid um w'en you wuz little boy."

--- From Aunt Fountain's Prisoner",
Joel Chandler Harris (Georgia Negro)

PART II

THE SPEECH PACKAGE

UNIT THREE

THE SOUNDS OF ENGLISH

Introduction

3.1. This unit will begin your formal study of the structure of the English language. You have been introduced to a view of what language is, as a cultural system, and you have studied the history and development of English. You will now see how your particular language functions. You will start with the smallest units, the sounds, which are the fundamental building blocks, and your study will lead you to progressively larger units—phrases, clauses, sentences. At each of several levels of analysis you will have to learn some basic terms and some rules concerning the inter action of the basic parts. Linguistic analysis is somewhat similar to the kinds of analyses that you may have encountered in biology, where you begin with a study of the simple cell and then you proceed to study progressively more complex organisms. You have to learn how the cell operates and how each of the larger clusterings of cells operate until you reach the complexity of the functionings of the human body. But as you could not really understand the human body as a biological organism without understanding the cell, so you could also not understand how language functions without understanding the basic sound units.

3.2. Segmental Phonemes. This unit will introduce you to the cells of language, the basic sound units of the language. We cannot refer to these sounds as "letters", because not all letters represent one sound. Many represent several sounds, and not all sounds are represented by one letter; many sounds can be spelled several different ways. The term that we will use to refer to a particular sound is "phoneme". To make things even a bit more complicated, we cannot say that each sound used in the language is a phoneme, for a phoneme is actually a group of sounds that a native speaker will recognize as being the same. For instance, the "p" in pit or pin is not exactly the same as the "p" in spin. Let us demonstrate the difference. If you hold your hand in front of your face when you say pit or pin, you will feel quite a puff of air as you articulate the "p", but as you say spin you will feel practically no air, except perhaps a little as you are articulating the "s". Go ahead—demonstrate it to yourself now. You can also illustrate this by holding a kleenex in front of your face when you make the same test; or hold a lighted match close to your lips and you will see that usually the "p" in pit and pin will blow out the match but the "p" in spin won't. However, wait until after class to demonstrate this test. These different kinds of "p's" are called allophones of the

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phoneme "p". As a matter of convention, when we are talking about the phonemes, we use slant lines /p/; but if we are talking about one of the allophones of the phoneme /p/, we would inclose it in square brackets [p]. Another demonstration of allophones and phonemes can be found in the English vowels. If we say bit and bid, we would agree that the vowel sound is the same; thus it is part of the same phoneme /i/. But if we listen very carefully, we could recognize that the /i/ in bit is slightly higher than the /i/ in bid. If we wanted to show this difference, we would talk about these two /i/'s being two different allophones, and on this level we could describe the /i/ in bit by writing its allophone as [i] and the /i/ in bid by writing its allophone as [I]. To a trained linguist this would immediately communicate the fact that the /i/ in bitwas slightly, but not significantly, higher than the /i/ in bid. Though you will not need to study the phonetic details of English, a linguist must first describe a language phonetically before he can arrive at a phonemic solution.

From this point on, we will not concern ourselves with the allophones of English; we will be content to acquire a mastery of the phonemes. Should you want more information about these small variations in sound, the allophones, your teacher will be able to provide you with sources of information concerning them. However, you should not be particularly concerned with these until at least after you have thoroughly mastered the phonemic system of English. You might then also be interested in making a comparison with the phonemic system of some other language or languages. Your foreign language teacher should be able to give you information about these, and if you are studying a foreign language from the modern point of view, using a language laboratory, you will automatically be introduced to the phonemes of this language. You will also be interested in making comparisons between the grammatical structure of some other language and that of English. ~~You~~ will find that other languages not only have different sounds (phonemes) than English, they also have different grammatical structures. The statement that if you knew English grammar you would have no trouble with Latin or some other grammar is not completely true. It is true that you might understand the grammatical structure of Latin more easily through a comparison. But you cannot expect that a knowledge of the grammatical structure of English will enable you to impose the same distinctions and categories on any other language. One of the languages most closely related to English is German,and even its grammatical system is considerably different from English.

While we are at it, we might as well debunk another common myth, the one that says that English is closely related to French, Latin, or any of the Romance languages. This is not true. It is true that because the Romans once conquered ancient Britain, and because of the Norman invasion of England, there are many Latin-stemmed words in English, borrowed directly from Latin, or through French, which is a derivation of Latin. But despite the influence of these borrowings, the structure—that is, the grammar, of English was not changed. English is a Germanic language, remaining most closely related to German,Dutch, Norwegian, and other members of this language family.

3.3. English Phonemes. There are thirty-three distinct sounds (phonemes) used in English structure. Nine of these are vowels; twenty-four are consonants or semi-vowels. The semi-vowels are used to make what are traditionally called the long vowels. These will be analyzed later.

3.4. Vowels. The nine short vowel sounds in English are demonstrated in the following chart. These contrasts will be adequate for most dialects of English, but *no* key is adequate for handling *all* dialect variations.

/i/	the vowel sound in *pit*, *sit*, *bit*, *hit*, *pin*
/e/	the vowel sound in *pet*, *set*, *bet*, *men*, *bed*
/æ/	the vowel sound in *pat*, *hat*, *bat*, *can*, *mad*
/ɨ/	the vowel sound in "*jest*" as in "he jest came", the first vowel in *sister*, or *children*
/ə/	the vowel sound in *putt*, *but*, *done*, *sun*, *mud*, *"uh"*
/a/	the vowel sound in *pot*, *hot*, *not*, *cot* (for most dialects)
/u/	the vowel sound in *put*, *book*, *foot*, *cook*
/o/	the first part of the vowel sound in *go*, *dome*, *poke**
/ɔ/	the vowel sound in *taught*, *caught*, *law*, as these words are most commonly pronounced in this dialect; in some dialects /oh/ would be used in these words.

Not all dialects of English will employ all nine of these contrasts. In some dialect areas one or two of these distinctions will be blurred into one vowel sound. A common blending is the loss of the /ɨ/ into the /i/ or the /ə/.

3.5. Consonants. The consonantal sounds of English are demonstrate in the following list:

/p/	the first sound in *pat*
/t/	the first sound in *tap*
/k/	the first sound in *cat*, *kitten*

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*This vowel sound does not appear by itself in many dialects. It can be seen in the coastal New England pronunciation of such words as *road* and *home*, for those that are familiar with that dialect.

/b/	the first sound in bat
/d/	the first sound in dot, dog
/g/	the first sound in get, gone
/č/	the sound often spelled with ch, as in the first and final sound in church
/ǰ/	the first sound in jury, the first and final sound in judge
/f/	the first sound in find, fill, fine
/θ/	the first sound in thin, thistle, usually spelled with the th
/s/	the first sound in sack, sip
/š/	the first sound in ship, shack, often spelled with the sh
/v/	the first sound in vine, villain
/ð/	the first sound, also often spelled with the th, in the, then
/z/	the first sound in zeal, zip
/ž/	the sound spelled with s in measure, treasure, pleasure, with z in azure.
/m/	the first sound in met, moon
/n/	the first sound in net, noon
/ŋ/	the sound spelled with ng in sing, ring, but in finger we have an /ŋ/ plus a /g/. Note the contrast in longer /ŋ/ only, one who wants something, and longer /ŋ/ + /g/ as when one thing is longer (in length) than another.
/l/	the first sound in lag, lollipop, listen
/r/	the first sound in rag, rip, rap

There are several pairs of consonantal sounds in English articulated almost exactly the same except for the use of the vocal chords. For instance, the English /p/ and /b/. The initial sounds in pill and Bill are made by a stoppage of the flow of air through the mouth at the lips and then a release. The main difference is that in the case of "pill" the vocal chords do not start vibrating until we have arranged our mouth (tongue, lips, etc.) for the formulation of the vowel sound. In the case of Bill, the vocal chords start to vibrate before we have started articulating the vowel sound. You may demonstrate this to yourself by placing your finger on your Adam's apple (larynx) and saying these two words aloud. You will be able to feel how much sooner your vocal chords start to vibrate in the case of Bill as contrasted with pill. In the following chart we will list on the top row those consonantal sounds that are articulated without the use of the vocal chords and directly beneath the appropriate phoneme we will list its voiced counterpart

/p/	/f/	/θ/	/t/	/s/	/š/	/č/	/k/
/b/	/v/	/đ/	/d/	/z/	/ž/	/ǰ/	/g/

3.6. Semi-Vowels. There are also three semi-vowels in English. These are generally listed with the consonants because, in terms of syllable structure, they function mostly consonantally; however, in terms of the basic nature of the production of these sounds, they are more vowel-like in nature. These semi-vowels are used with the vowels to make diphthongs, or glides. These diphthongs are what are traditionally described in English as long vowels. Actually, English has no long vowels in the sense that some languages do. By this we mean simply doubling in duration the sound of a simple vowel. In English, these sounds actually glide from one position to another. This will be demonstrated.

The three semi-vowels are the following:

/w/	the first sound in wet
/y/	the first sound in yet
/h/	the first sound in hit

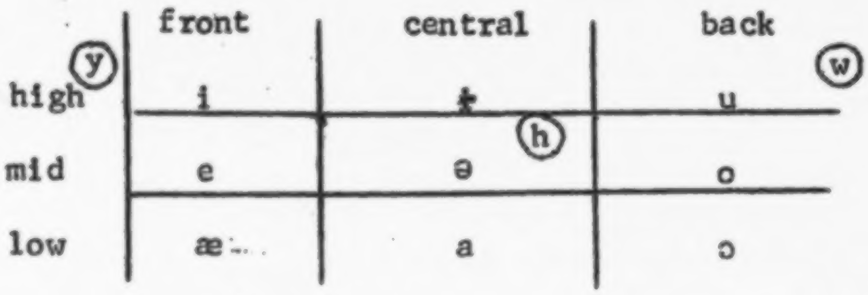
In the above cases, these semi-vowels functioned in the same manner as any other initial consonant would. But these semi-vowels may be used as on-glides (as above) or off-glides, (as you will see below). Let us demonstrate some of the more common ones. In the chart below, the first listing is the normal spelling; second, the phonemic composition, and finally, the key words which demonstrate the sound in most dialects.

⟨ē⟩	/iy/	the vowel sound in beet
⟨ā⟩	/ey/	the vowel sound in mate
⟨ī⟩	/ay/	the vowel sound in mine

⟨oy⟩	/ɔy/	the vowel sound in boy; some dialects would use /oy/ in this word.
⟨ō⟩	/ow/	the vowel sound in go, oe as in toe
⟨au⟩	/aw/	the vowel sound in house (note: in nearby Canada, the vowel selection in this item would be /ew/, especially in the Toronto accent. In parts of the South, it would be /æw/)
⟨ū⟩	/uw/	the vowel sound in soon (in some southern dialects only the u,not the uw, would be used; other dialects would use /ɨw/)
⟨ai⟩	/eh/	the vowel sound in air, or yeah
⟨i⟩	/ih/	the vowel sound in ill
⟨ī⟩	/əy/	the vowel sound in night, fight. Some dialects would use /ay/ in these items
⟨al⟩	/ah/	the vowel sound in palm, in some dialects it would be /ahl/
⟨o͝o⟩	/uw/	the vowel sound in woo

Actually, then, what are thought of as long vowels in reality are diphthongs or glides. If you feel that you need further evidence of this fact, listen carefully to a singer as he or she holdsa long note, such as the long a. You will be able to hear the exact point at which the singer breaks from the /e/ part of the vowel sound to the /y/ glide part of the sound. This is good training to make yourself more conscious of the vowel sounds in English.

3.7. The nine vowel sounds in English can be set up on the following sort of chart, and the area of the glide for the semi-vowels is shown by its placement in regard to the vowel sounds.



	front	central	back
ⓨ high	i	ɨ	u ⓦ
mid	e	ⓗ ə	o
low	æ	a	ɔ

The vowels in the first column are all articulated in the front of the mouth, those in the middle column are articulated in the middle of the mouth, and those in the back column are articulated in the back of the mouth. The top row indicates that the vowel is made with the tongue raised toward the top of the mouth, the middle column indicates a mid-raised tongue position, and the bottom row indicates that the tongue is lying fairly flatly in the bottom of the mouth. A /y/ glide can be articulated from any of these positions by gliding or raising the tongue toward a high front position. The /w/ glide may start from any of the nine basic positions and glide towards a high back position. The /h/ glide, again, may originate from any of the nine short vowel positions and glide toward a mid-central position. This makes a total possibility of twenty-seven glides in English. No one dialect employs all of these possibilities, but each possibility is a reality, if we survey all the dialects of English. For instance, for most standard American speech, the vocalic glide in house would be transcribed phonemically as /aw/. However, as mentioned, Toronto dialect the /ew/ is used. In the same item, in some southern dialects, the /æw/ would be used. Below is a list of whole words written in ordinary spelling and in phonemic transcription. Study this list to reinforce your learning of how sounds of English are spelled, and their analysis from a sound point of view. This short comparison should give you some insight into why spelling in English is often a problem. It should also adequately demonstrate why we said, early in this unit, that each letter does not represent just one sound, nor is one sound always represented by the same letter.

cat /kæt/
bet /bet/
ship /šip/
either /iyđɨr/
sing /siŋ/
bought /bɔt/
moon /muwn/
thug /θəg/

bridge /briǰ/
length /leŋθ/
said /sed/
about /əbawt/
thatch /θæč/
dream /driym/
peel / piyl/
sack /sæk/

boat /bowt/
knight /nayt/
those /đowz/
singer /siŋɨr/
finger /fiŋgɨr/
warmth /wɔrmpθ/
name /neym/
shame /šeym/

It is true that if we go back far enough in history- English spelling was more phonemic than it is now. This is because any live language—that is any language that is,actively spoken by a group of people—is constantly undergoing change. Please recall examplesof this from the unit that you did on the history of English. Writing systems are inherently more conservative and spelling changes occur more slowly than do sound changes. Therefore, the longer a spelling tradition has been in existence, the more it will be in diverge from the pronunciation practices at a given time. Such English spelling as night for /nayt/ was more meaningful, a thousand years ago, for the way that the word was pronounced at that time. Currently, we may see the following inconsistencies. The a , for example, stands for /æ/ in hat, /ey/ in name , /ə/ in about, for /a/ in father, and for /ɔ/ in hall. The combination

⟨ng⟩ stands for /ŋ/ in sing and singer, but for /ŋg/ in finger.

On the other side of the coin is the fact that /ay/ is spelled with ⟨y⟩ in my, ⟨i.....e⟩ in shine and ⟨i⟩ in light. /e/ is spelled with ⟨e⟩ in bet, ⟨ai⟩ in said, and ⟨ea⟩ in bread.

There is at least one virtue in English spelling, and that is, regardless of the particular dialect we speak, with its own phonemic selection, we generally spell words the same. A few exceptions are the Canadian and British way of spelling humor and humour, honor as honour, etc. Generally, however, despite the fact that a particular dialect may be so far removed as to make it difficult to understand someone speaking it, we will nevertheless have no difficulty in following his spelling.

EXERCISE ONE

Transcribe the vowels in the following words phonemically. DO NOT concern yourselves with the consonants.

1. hat
2. help
3. bit
4. ship
5. lap
6. cot
7. hop
8. clock
9. sought
10. spun
11. good
12. gun
13. shook
14. fought
15. fun
16. ham
17. was
18. born
19. bath
20. at
21. of
22. held
23. book
24. look
25. rim
26. is
27. dwell
28. have
29. frock
30. gag

EXERCISE TWO

Transcribe the following words phonemically, paying particular attention to the consonants and consonantal clusters.

1. church
2. ridge
3. ham
4. cram
5. push
6. lot
7. myth
8. whiz
9. miss
10. rung
11. box
12. west
13. wings
14. hat
15. scratch
16. witch
17. which
18. could
19. debt
20. ring
21. wring
22. match
23. math
24. crumb
25. rink
26. crock
27. Rex
28. butt
29. but
30. would

EXERCISE THREE

Write the following words in normal English spelling. As they are mostly commonly used words, they should provide you with practice in identifying the sounds of English and the appropriate phonemic symbol.

1. /ləg/
2. /lɔg/
3. /šæm/
4. /kil/
5. /dəl/
6. /kik/
7. /fləd/
8. /ðayn/
9. /kriym/
10. /šown/
11. /meyn/
12. /ǰəǰ/
13. /peyl/
14. /hæŋ/
15. /fin/
16. /friyz/
17. /sow/
18. /snawt/
19. /pres/
20. /kleym/
21. /kruwn/
22. /krawl/
23. /fɔyl/
24. /θik/
25. /layk/
26. /trayb/
27. /growv/
28. /krənč/
29. /fliy/
30. /fəǰ/
31. /streŋkθ/
32. /gud/
33. /həsɨl/
34. /eybɨl/
35. /praym/
36. /čin/
37. /məd/
38. /wigl/
39. /čiyz/
40. /čaym/
41. /čirč/
42. /leyn/
43. /rowzɨz/
44. /skwiyl/
45. /piyl/
46. /miyl/
47. /fəniy/
48. /ruwž/
49. /kɔt/
50. /məniy/
51. /əbawt/
52. /meniy/
53. /pəniš/
54. /bəbil/
55. /fæsɨn/
56. /kawč/
57. /sisiy/
58. /jərniy/
59. /ay/
60. /weriy/

61. /depɔrtmɨnt/
62. /rezɔrt/
63. /laǰ/
64. /gəraǰ/
65. /fuliš/
66. /læŋgwiǰ/
67. /ɨŋgliš/
68. /spæniš/
69. /rəšən/
70. /fəyt/
71. /trəyt/
72. /məyt/
73. /ləyt/
74. /menčən/
75. /devil/
76. /sentril/
77. /powliš/
78. /pališ/
79. /trᵊbɨl/
80. /sqabɨl/
81. /nat/
82. /mayn/
83. /rowm/
84. /hæŋ/
85. /həŋ/
86. /fowniym/
87. /fanik/
88. /sᵊyt/
89. /kwikliy/
90. /pliy/
91. /pliyz/
92. /rəš/
93. /məš/
94. /fləš/
95. /gəš/
96. /šəš/
97. /ləš/
98. /eleveytɔr/
99. /apɨreytɔr/
100. /neyčɨr/

EXERCISE FOUR

Write the following words in phonemic transcription. Use your own pronunciation as a guide and do not hesitate to refer back to the keys that were provided for you. Pay particular attention to the vowels and do not hesitate to pronounce the key words and the words in the exercise out loud, until you are thoroughly familiar with them.

1. sad
2. but
3. man
4. set
5. ring
6. said
7. rip
8. cut
9. wing
10. rang
11. rung
12. sung
13. mash
14. mush
15. crush
16. male
17. meal
18. while
19. grow
20. through
21. craze
22. feed
23. dream
24. lug
25. thug
26. mace
27. dove
28. crash
29. mate
30. crate
31. leave
32. grieve
33. sieve
34. crave
35. knave
36. brave
37. edge
38. cram
39. roof
40. Lou
41. do
42. wine
43. swine
44. crime
45. sponge
46. doll
47. rich
48. switch
49. which
50. witch
51. cube
52. house
53. fluke
54. mesh
55. ski
56. clerk
57. crack
58. wrought
59. thought
60. bought
61. round
62. mound
63. crow
64. grow
65. snitch
66. mitch
67. thrush
68. such
69. rice
70. green
71. George
72. gorge
73. wean
74. rose
75. snows
76. queen

77. large
78. barge
79. charge
80. then
81. thee
82. thy
83. crew
84. pile
85. smile
86. while
87. mile
88. blood
89. file
90. tough
91. buff
92. fluff
93. smirk
94. lurk
95. knight
96. knot
97. jerk
98. breathe
99. breath
100. death

EXERCISE FIVE

Follow the same directions as for the preceding exercise. These words have more than one syllable - be sure to transcribe each syllable with a vowel. If the vowel in an unaccented syllable is difficult to hear -- it is probably a /ə/ or /ɨ/. Again, do not hesitate to refer to the key and to previous exercises.

1. thinker
2. canopy
3. mission
4. father
5. strengthen
6. thistle
7. around
8. carriage
9. magic
10. tragic
11. choral
12. rigid
13. foolish
14. thicker
15. accept
16. stupid
17. cooler
18. bristle
19. missile
20. Mary
21. stylish
22. duty
23. reject
24. shuttle
25. engage
26. defect
27. refute
28. denote
29. remote
30. promote
31. devote
32. richer
33. fisher
34. freshen
35. sassy
36. molding
37. vicious
38. racial
39. ruddy
40. snooty
41. narrow
42. mangle
43. dreamy
44. cutter
45. ringer
46. setter
47. cleaner
48. deeper
49. meamer
50. schemer
51. diner
52. miner
53. minor
54. marry
55. merry
56. Marie
57. greasy
58. housing
59. rousing
60. mousing
61. curable
62. student
63. teacher
64. principal
65. adverbial
66. athlete
67. athletics
68. personal
69. personnel
70. construction
71. devotion
72. devotee
73. meditation
74. fascination
75. physician

76. benediction
77. stinker
78. thorough
79. truly
80. thruway
81. byway
82. diverged
83. diversion
84. reader
85. seeder
86. emulation
87. veneration
88. propagation
89. physical
90. quizzical
91. revolution
92. commotion
93. rescinding
94. depending
95. capitalize
96. nationalize
97. amazement
98. outrageous
99. biology
100. reiterate

3.8. <u>The Suprasegmentals of English</u>. In addition to the thirty-three segmental phonemes of English, there is an entirely different kind of phoneme which has to do with the intonation patterns in English. Some aspects of what is usually considered intonation is actually paralanguage, which we have already disucssed. But paralanguage is more optional; you can select different ways of saying things to give the impressions that you want. Sometimes you use paralanguage to achieve very subtle effects. But intonation is something you cannot do without. It is vital to spoken syntax. You CANNOT make any utterance whatsoever in English without intonation, even if you say one single word. As a practical aspect, a study of intonation should help you in some of the problems of punctuation. There will be a unit devoted to just this problem. But first you have to learn about English speaking patterns.

English intonation is composed of three kinds of suprasegmental phonemes, which, in a sense, overlay the other phonemes. These are phonemes of stress, pitch, and juncture. There are four of each. We will begin our discussion with stress.

3.9. <u>Stress</u>. The symbology for the four degrees of stress in English is the following:

/´/	primary stress
/^/	secondary stress
/`/	tertiary stress
/˘/	weak stress

Let us demonstrate primary stress /´/ first. If we use the word subject as a noun, we place the louder stress on the first syllable, as in "What's the súbject?" But if we use the same word as a verb, the louder stress will be on the second syllable. "We'll subjéct him to an examination." There are many such examples in English where a noun or adjective will take the louder stress on the first syllable and a verb will take it on the second syllable.

noun	verb
íncrease	incréase
prótest	protést
réfuse	refúse

The weakest degree of stress in English may be demonstrated in many words. Here are a few examples, as they would sound if we uttered these words in isolation.

mónĕy fúnny̆ quíckly̆ rúnnĕr búttŏn fástĕn quíckĕst

The two intermediate degrees of stress, the secondary /^/ and the tertiary /`/ may be seen in polysyllabic words or in phrases.

aútŏmŏbìle phótŏgràph dètérmĭne dèlíbĕràte cònsídĕr dèbátăblĕ

These intermediate degrees of stress may be demonstrated in contrasts between what we usually consider a compound noun type of construction and an adjective preceding a noun. Here are a few examples: the thing a teacher writes on is a bláckbòard, but any board that happens to be painted black is a blâck boárd. The species of bird known as bláckbìrd has the primary stress on the black, but any bird that happens to be black would be a blâck bírd. Consider the distinction between swéet sâlesmăn (someone who sells sweets) and swêet sálesmăn (a salesman you happen to think of as sweet). Also, 1600 Pennsylvania Avenue in Washington, D.C., is known as the Whíte Hòuse. But we can also say that "Thè Whíte Hòuse" ĭs ă whîte hóuse. The words elevator and operator spoken individually would receive the following stresses - élĕvàtŏr, ópĕràtŏr; but spoken together in one phrase one of the primaries would be reduced to a secondary, allowing us to demonstrate all four degrees of stress in one utterance -- élĕvàtŏr ôpĕràtŏr.

3.10. Pitch. When we discuss pitch, we are referring to the raising or lowering of the voice, not in terms of volume but in terms of musical pitch. Again, we must disregard the over-all high or low pitch of an individual's voice and the fact he may gear his pitch higher, especially in moments of stress. But even when we are speaking normally, we will vary our speech between four degrees of highness or lowness. This happens to be true even when people are speaking in what we call a monotone. The normal pitch of a person's voice is part biology, part personality. The pitch range that he selects for his whole utterance is a matter of his emotional disposition at the moment. But what we will discuss here is the necessary change in pitch which every speaker MUST use every time he speaks an English utterance. This is linguistic pitch, and there are four degrees of it:

/4/	the highest pitch
/3/	the second highest pitch
/2/	the second lowest pitch
/1/	the lowest pitch

We normally, though not always, start an utterance on pitch /2/. We often go up to pitch /3/ in conjunction with the primary stress. Let us examine a simple utterance.

2   3 1
Whât àre yòu dóĭng?

If we want greatly to emphasize what the person is doing because it panicked or alarmed us, we probably go up to pitch /4/ on the "doing".

2   4 1
Whât àre yòu dóĭng?

If we want to place the emphasis on the person we are addressing or if we are particularly annoyed with him, we may switch the primary stress and the raising of the pitch to that word.

2   3   2 1
Whât àre yóu dôĭng?

Pitch /1/ is often used for an insertion, as a sort of deliberate de-emphasis. It often contains an editorial comment that the speaker emphasizes by underplaying.

2 2   1   1   2   3 1
Hárry̆, thĕ rát, wênt hóme.

As is also indicated in these examples, pitch /1/ is often used in conjunction with the termination of a statement. Students should be cautioned not to expect an automatic pitch /3/ at every occurrence of primary stress. Many speakers do not go up to pitch /3/ at this point in all utterances, and it is not necessary to do so in all cases.

3.11. Juncture. There are four junctures in English. Impressionistically, we tend to associate juncture with pause, but this is not true, strictly speaking. It is true that pause frequently accompanies juncture, but there are other more necessary distinctions of juncture. The four junctures of English are described as follows:

/#/ double cross juncture (signalled by a rapid falling of pitch and fading of the voice, a decrescendo effect)

/||/ double bar juncture (signalled by a rapid rise of pitch, and fading of the voice, often associated with questions)

/|/ single bar juncture, pitch neither rises nor falls (functions as a phonological phrase marker)

/+/ plus juncture, breaks the phonemic flow

The double cross juncture occurs commonly at the termination of a statement. It is usually interpreted as a signal that we have concluded a particular utterance. It occurs often in a package following a drop to pitch level /1/, as in the following example:

^{2}Hè + wênt + ^{3}hóme^{1} #

If we were to make this same utterance, but intended it as a question, we might say it in this way.

^{2}Hè + wênt + ^{3}hóme^{3} ||

Do not associate the /||/ juncture as occurring only in questions. Often it will occur internally within a sentence, as in the following example:

^{2}Mr. ^{2}Jónes^{2} || ^{2}dîggĭng + ĭn + hìs + gárdĕn^{2} || ^{2}fôund + ^{3}ă+wórm^{1} #

The single bar functions as a sort of phrase maker, a way to group words together, and it is marked by the fact that the pitch will neither rise nor fall. Either of the following is a possible English utterance, depending on the style of speaking that you wanted to achieve, mainly the number of primary stresses.

^{2}Thè + mân + ŏn + yòur^{2} + ríght^{2} | ^{2}ìs + hèr + ^{3}bróthĕr^{1} #

^{2}Thè + ^{2}mán^{2} | ^{2}òn + yòur + ^{2}ríght^{2} | ^{2}ìs + hèr + bróthĕr^{1} #

The plus juncture is best illustrated as an interruption in the flow of phonemes. It appears often between words but many longer "words" will have plus junctures within them and sometimes two "words" will be said as one phonological unit. To prove to yourself that you can actually hear the plus juncture, compare the pronunciation I scream and ice cream. In the first utterance, you place the /+/ juncture after the I, in the second, you place it after the s. Phonemically, you would transcribe this pair as follows:

/ay + skriym/ /ays + kriym/

The actual pause associated with a plus juncture is only about 1/40 of a second; but if you will recall our discussion of the allophones of a phoneme, we can pinpoint what helps you to hear this extremely brief pause. The /k/ that we hear after a juncture is heavily aspirated (the puff of air) as was the /p/ in *pin*. The /k/ that follows an /s/, as in /skriym/, is not aspirated at all. This difference in the pronunciation of the /k/, which we react to *subconsciously*, is what helps us place the location of the juncture. If we were not able to hear this minute difference, the two utterances, *I scream* and *ice cream* would be ambigous, and we know they are not. Even children like to recite little poems based on puns. These are puns because they sound *almost*, but not *really* alike; e.g., "I scream, you scream, we all scream for ice cream."

Another pair we can use to illustrate the plus juncture is *nitrate* /nay+treyt/ and *night rate* /nayt + reyt/. Compare *needed rain* /niyd + d + reyn/ and *need a drain* /niyd + ə + dreyn/.

3.11. *Intonation Pattern*. Another important idea for you to understand is the intonation pattern. This is a sort of phonological phrase. It is bounded by a /|/, /||/ or /#/, and there can only be one primary stress within any one intonation pattern. Although this idea may not strike you as very important at the moment, you will see the significance of it, and the reason for your learning it, when we come to the application of what you have been learning, especially when we study punctuation and syntax.

If you wish to place more than one primary stress on an utterance, you have to have one of these three junctures intervening - /|/, /||/, /#/. Let's look at some examples:

Hè wênt tŏ thĕ stóre#

Said this way, the utterance has only one primary stress. We can also place a primary stress on *went*. In that case, we would transcribe it:

Hè wént | tŏ thĕ stóre #

Notice that we automatically place at least a /|/ juncture somewhere between the two primary stresses.

In such an utterance, we should also mark the pitches; and, as a matter of convention, we *always* mark the pitch at the beginning of an utterance or of an intonation pattern, at the end of the pattern, and at the primary stress. We also sometimes mark it if it changes the pitch at some other point within the intonation pattern. Study these possibilities:

^{2}Hè wênt tŏ thĕ ^{2}stóre^{1} #

^{2}Hè wênt tŏ thĕ ^{3}stóre^{1} #

^{2}Hè ^{2}wént^{2} | ^{2}tò thĕ ^{2}stóre^{1} #

^{2}Hè ^{2}wént^{2} | ^{2}tò thĕ ^{3}stóre^{1} #

There is a local way of saying wonderful which is interesting to analyze.

^{2}wón^{3}dèrfŭl^{1} #

Notice that you raise your pitch on the second syllable even though the stress remains on the first syllable. The way this word would be said in most parts of the U.S. would be:

^{2}wóndĕrfŭl^{1} #

Let us look at the transcription of a longer utterance.

^{2}Hè ^{2}wént^{2} | ^{2}tŏ thĕ ^{2}stóre^{2} # ^{2}ănd ^{2}bóught^{2} | ^{2}ă lôaf ŏf ^{3}brĕad^{1} #

In listening to this sentence, pay particular attention to the difference between pitch /2/ with /|/, pitch /2/ with /#/ and pitch /1/ with /#/.

EXERCISE SIX

Listen to the recording of the following sentences and mark the primary stresses, the (|), (‖), and the (#) and the changes in pitch. Sentence 1, is done for you.

1. ^{2}He is my ^{2}bróther.^{1}#
2. some of the men
3. He just went by.
4. I will give you pears.
5. in a handful of dust
6. brained by a policeman
7. every single moment
8. They used it all up.
9. What's in it?
10. What's in the box?
11. three college presidents
12. three college professors
13. a very dirty kitchen sink
14. a very dirty circus clown
15. three drunken deans
16. We used to know them.
17. Who are you going with?
18. two sheepish church mice

19. two sheepish mice
20. all the ten fine old stone buildings
21. The sons raise meat.
22. We send nitrates by night rates.
23. They wanted a nude eel.
24. a student of home economics
25. oh what strange innuendoes
26. oh what I've seen in the store
27. We needed a good flight wrap.
28. a fairly new reading lamp
29. some newly planted weeping willows
30. an unreported flying saucer
31. sixteen hours flying time
32. the rabbits and hares
33. all go in pairs
34. and even the bears
35. in couples agree
36. He lives in the White House.
37. He lives in the white house.
38. He lives in the White house.
39. It's a good screening device.
40. He smacked the screaming child.

NAME ______________________________

SCHOOL ____________________ Grade ______

TEACHER ______________________________

QUIZ I (Reproduced with permission from Workbook in Descriptive Linguistics by Henry A. Gleason, Holt, Rinehart and Winston, Inc.)

I. On a separate sheet of paper, do exercises in normal spelling.

1. ðə stiyd bit ɨz mæster,
haw keym ðɨs tə pæhs?
hiy hərd ðə gud pæstər
kray, ɔhl fleš ɨz græhs.

2. ðər wənts wəz ə fišər neymd
fišər
huw fišt fər ə fiš in ə fišər,
bət ðə fiš wɨð ə grin
puld ðə fišərmɨn in;
naw ðeyr fišiŋ ðə fišər fər
fišər

3. betiy hæd ə bit əv bitər bətər
hwič meyd ər bætər bitər.
šiy gat ə bit əv betər bətər
ən meyd ər bitər bætər bətər.

4. ə fliy ən ə flay un ə fluw
wər imprizɨnd, sow hwət kud ðey
duw?
sed ðə flay "let əs fliy",
sed ðə fliy "let əs flay",
sow ðey fluw θruw ə flɔh ɨn
ðə fluw.

II. Transcribe the following words phonemically.

1. rich
2. bush
3. his
4. things
5. buff
6. bared
7. thank
8. debt
9. could
10. jug
11. ridge
12. must
13. hiss
14. that
15. guess
16. vex
17. ring
18. top
19. yes
20. sham
21. knot
22. knifed
23. hung
24. dumb
25. shock
26. wring
27. this
28. give
29. jam
30. myth
31. box
32. hook
33. which
34. Butch
35. latch
36. them
37. zinc
38. gem
39. gap
40. zest

NAME ________________________________

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QUIZ I - Part III

III. Transcribe each of the four sentences phonemically. Also include all junctures, all primary stresses and all pitch changes. You do not have to indicate pitch 2, but mark all changes from pitch 2.

1. How much are the apples?

2. Three for a quarter.

3. Sorry, they're scarce right now.

4. What about some oranges?

QUIZ II (Reproduced with permission from *Workbook in Descriptive Linguistics* by Henry A. Gleason, Holt, Rinehart and Winston, Inc.)

NAME ____________________

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TEACHER ____________________

I. On a separ.te sheet of paper, write exercises 1-4 in normal spelling.

1. sed ə greyt kangrɨgeyšɨnɨl priyčər
tuw ə hen "yuhr ə byɨwtɨfəl kriyčər"
ən ðə hen, pliyzd ət ðæt
leyd ən ehg ɨn iz hæt,
ən ðəs dɨd ðə hen riywɔhrd biyčər.

2. ðər wəz ə yəŋ felə neymd hɔhl
huw fel in ðə spriŋ in ðə fɔhl
twud əv bin ə sæd θiŋ
if iyd dayd ɨn ðə spriŋ
bət iy didɨnt, hiy dayd in ðə fɔhl.

3. ðə reyn it reynɨθ an ðə ǰəst
ən ɔhlsow an ðə ənǰəst felə.
bət čiyfliy an ðə ǰəst, bɨkəz
ðə ənǰəst stiylz ðə ǰəsts əmbrelə.

4. æz ə byɨwtiy ay æm nat ə stahr,
ðər ərəðərz mɔhr hænsəm bay fahr,
bət may feys, ay dont maynd ɨt,
fər ay əm bɨhaynd ɨt;
its ðə piypɨl ɨn frənt get ðə ǰahr

II. Transcribe the following words phonemically.

1. Scotch
2. should
3. cup
4. lath
5. thumb
6. hod
7. peas
8. ice
9. lose
10. root
11. pined
12. sight
13. do
14. east
15. loaf
16. peace
17. eyes
18. loose
19. rude
20. pint
21. sighed
22. due
23. eased
24. healed
25. prize
26. raise
27. choose
28. mate
29. down
30. place
31. dew
32. roast
33. price
34. race
35. coat
36. made
37. bound
38. daze
39. freeze
40. posed

NAME ______________________________

SCHOOL ________________ GRADE ______

TEACHER ___________________________

QUIZ II - Part III

III. Transcribe each of the four sentences phonemically. Also include all junctures, all primary stresses and all pitch changes. You do not have to indicate pitch 2, but mark all changes from pitch 2.

1. They're too much trouble.

2. I'll eat'em out of a can.

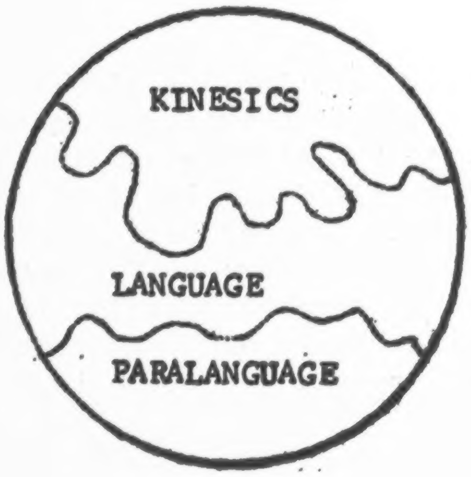
3. How many do you want?

4. But not those bruised ones.

UNIT FOUR

PARALANGUAGE AND KINESICS

4.1. In order to be able to understand the total aspects of speech, we must take a look at two systems of communication closely related to language; in fact, with language they form a tightly integrated whole called the "speech package". We could show the relationship in the following diagram.



4.2. Kinesics is the study of the bodily gestures and facial expressions that accompany speech. We often think of these as part of our deliberate efforts, but many of them automatically accompany speech and many others are subconscious expressions of how we feel about what we ourselves are saying or what someone is saying to us. We might divide the field of kinesics into two parts: those gestures and expressions which are conscious, and thus deliberate, and those which are totally or largely subconscious, and therefore mostly beyond the deliberate control of the individual. The conscious systems of gestures we might refer to as deliberate kinesics; the primarily subconscious ones could be termed simply unconscious kinesics.

The kinesic system is sometimes used to punctuate our remarks. In fact, it is sometimes impossible to make a statement without such kinesic punctuation.

Let us look at some examples. All of you have surely observed the differences in the way males and females gesture. Do not assume that this is universal and due only to biology. Much of it is the way that our culture tells us that males and females should behave. These characteristics become exaggerated, subconsciously, when "flirtation" is involved. For instance, males, as a general pattern, tend to maintain a straight wrist line, whereas females use a relatively "limp" wrist. In "flirting", these basic postures are even more apparent. When we find a male or female that fails to behave in the way that we have been taught to expect, we react negatively to the kinesic communication that we receive.

An example of a kinesic marker that constitutes an editorial comment on what you are saying or what is being said to you is rubbing the nose. This generally implies considerable skepticism. Either you are subconsciously questioning your own sincerity, or you have some doubt about the sincerity or validity of what is being said to you. Do not, however, accept this as an absolute. It is possible that someone has an itchy nose. Or this skepticism may be expressed by rubbing the ear, continually tugging on a tie, or other such gestures. Also remember that this is a subconscious gesture, and you should use knowledge of this kind just as an aid in interpreting the total communication. Sensitive people have always reacted to these kinds of things long before they were formally studied.

Another good opportunity for studying kinesics is to watch a group of girls at a party as an attractive male enters the room. Notice how many will move their hands to the backs of their heads and start fussing with their hair. One of the male equivalents of this gesture is "hitching up" the trousers. We accept the cowboy sort of standard of masculinity in our culture. As you watch a western on TV, notice how often the hero will employ this gesture. Men also subconsciously reveal their interest in the opposite sex (and hence their own appearance) by such gestures as straightening their ties or smoothing their hair.

Generally, the way a person holds himself, his entire body posture, the way he walks, the way he gestures, should be congruent with his age, sex, and physical condition. If a twenty-five year old man walks too slowly, we immediately wonder what kind of disability, temporary or permanent, is causing it. If we see our friend strolling slowly down the corridor with hands in pockets, shoulders slumped, and eyes downcast, we will wonder what is causing his depression.

In this sense, we read kinesics, and sometimes the message is very clear. Some of the more obvious things we could point out is that in our culture we "jump for joy". When we are happy, we employ lively gestures and a smiling, frequently changing, facial countenance. When we are depressed, our facial muscles tend to be immobile and our gestures will be restricted and lack energy. Of course, there is a type of happiness, a serenity beyond excitment, which many people express in great calmness of gesturing. But here the kinesics will be very smooth and the posture will still be alert, whereas the lack of gesturing that is indicative of depression will signal great lethargy. In the latter case, the message almost indicates that what is being siad kinesically is "What's the use? Why bother living?" The kinesics of serenity say, "I am content; I don't have to try; I have what I want." If these serene gestures and manners are exaggerated, as holding the shoulders extra rigid and having a benign, pitying smile on the face, they then become the gestures which are those of smugness. These will create an unfortunate effect on the observer, motivating him to desire the removal of that smugness or over-contentment.

The way a person handles his body is generally very indicative of personality traits. A very rigid, more than perfect posture will often correlate with a rigid attitude toward life. He will often be inflexible, with good probability of a perfectionist attitude. On the other hand, sloppiness in dress will often correlate with sloppiness in other habits. You would not expect to find someone who wore dirty, spotted clothes to have a neat house.

A relaxed, flexible, but alert bodily posture is most apt to be correlated with the same kind of habits in other areas of behavior. This is why we learn so much about a person just by seeing him.

Recently, a young couple was observed at a lengthy party during which they became engaged. Though none of their conversation was overheard, the progress of their relationship was spelled out in the gestures that were employed.

At the beginning of the evening, the gestures were out-going and aimed to include everyone in the room. During the course of the evening, they progressively became smaller and smaller, aimed more and more at one individual only. The gestures were made closer to the body. Like the lowering of the voices, they were aimed at communicating with one individual only. Even the bodily postures changed. Originally, the couple sat facing the whole room, aiming their kinesics toward everyone in general. When the point of greatest intimacy in communication was desired, their gestures were aimed only at each other, excluding as much as possible of the outside world in their communication. Of course, everyone was able to read their kinesics to the degree of becoming aware of their intense personal interest in each other.

The things that have been mentioned here are general and not far below the threshold of awareness. The more astute students of kinesics will look for the more subtle clues. Everyone will notice two people obviously highly interested in each other. A careful observer might be able to discern this mutual interest before the couple themselves was aware of it. If one individual adjusts his facial expressions, his tone of voice, his gestures, to another, he may be communicating subconscious interest even before he is consciously aware of his own motives.

Some trained kinesic specialists boast that they are able to detect falsehoods as accurately as a lie detector, and indeed they operate on the same principle. A lie detector finds out a deceiver by recording subconscious changes in pulse rate, breathing, or other bodily function. The kinesic specialist, onee he has accustomed himself to the gesturing patterns of an individual, will look for minute, barely perceptible twitches, of which the individual is unaware. Or the individual may even be so obvious as to rub his nose. There may be such noticeable changes as a difference in his tone of voice, the speed with which he talks, the loudness, etc. The trained kinesic specialist looks for the unconscious gestures which reveal the individual's own attitude toward what he is saying.

In the study of kinesics it is not important to provide a catalogue of gestures and a translation of their meaning. What is important is the development of a sensitivity to these gestures and the "reading" of them in that particular situation. Look for what "fits" or doesn't "fit" -- after considering who the person is and what the situation is. If all the gestures are appropriate for the occasion, we tend to assume that the person is adjusted to it. If some of the general postures, gestures, or facial expressions are not appropriate, then we may begin to look for reasons why the individual is protesting about the position in which he finds himself. One warning: use, sympathetically, any information you may think you have obtained. Don't become an arm-chair psychoanalyst. Such conceit almost inevitably leads to error. Highly trained linguists (who are also usually social anthropologists) do work with psychiatrists in trying to learn more, more quickly, about a patient. But they do this only after years of intensive study. Sometimes they will aid an analyst in interpreting the social significance of the subconscious communication, but they maintain a cautious attitude about their interpretations, and they leave the treatment of the patient strictly to the doctor.

4.3. In our discussion of the loudness, or the "tone" of a person's voice, we began to look at paralanguage. It is impossible to speak without paralanguage. A term which should help you understand this statement is paralinguistic set. Let us assume that you are having a quiet conversation with your boy friend or girl firend. You have just returned from one of your nicest dates. You are alone in the room, but there are other people in the house. You start to tell each other how you have enjoyed the evening, and perhaps how you feel about each other. Now the degree of over-all loudness that you use on this occasion, at least hopefully, would be different than the volume you would select when your teacher calls on you for an answer to a question and insists that you speak so that everyone can hear you. In both situations you would still use all four degrees of stress defined when we discussed the supra-segmentals, but the overall loudness -- the voice set -- would be chosen for the occasion.

In the living room scene you would also probably use a lower voice set in terms of the overall pitch, but you would still continue the four contrasting phonemic pitch points. Any lowering of the pitch range of your voice is usually an indication of a "confidential" content of speech. On the other hand, at a crucial moment in your basketball team's most important game you would probably raise the overall pitch range of your voice, as well as increasing your volume to the point of shouting.

As you talk to your date, you would probably also use a very smooth diction, that is, you would remove as much sharpness as possible from your speech. But if you suddenly become angry, even in this kind of situation, you might "spit" the words out, articulating each sound very forcefully and precisely. For instance, you would use very heavy aspiration on such phonemes as /p/, /t/, /k/, /b/, /d/, or /g/, as you might say "I did not!" with a little puff of air after the /d/ and the /t/.

Other examples of some special paralinguistic effects would be talking through a laugh, or through crying, or having a "break" in your voice, or a rasp. You also use things known as vocal segregates, which are paralanguage rather than language, as when you say "m hm" or "uh, uh".

Again, these are only examples of paralanguage, not a complete catalogue of possibilities. Such a catalogue has been made by linguists, and we will list some of the categories for you; but you should concentrate on gaining the ability to make general distinctions between what is paralanguage and what is part of the formal system of language.

Our discussion of kinesics has been general. There was no attempt or intent to train students to become kinesic analysts. In regard to paralanguage, however, it is necessary to offer a more detailed system for at least a rudimentary analysis of the phenomena involved. There are two reasons why students should know how to identify the various aspects of our paralinguistic system and how to separate those events which are a part of language proper and those events which are a part of the paralinguistic system. The first of these is the general educative value of being able to understand a system which is so completely involved in our speaking. Paralanguage is such an intrinsic part of the speech package that our writing system attempts to find a means of recording paralanguage as well as language. And this leads to our second justification for the necessity of some knowledge about paralanguage. Our punctuation system is involved with the messages that we transmit by paralanguage as well as language. In order for you to be able to understand how the punctuation system works, you must be able to recognize certain paralinguistic events, as well as the linguistic ocourrences of the suprasegmental events -- pitch, stress, and juncture -- which you have been studying. The exercises in the chapter on punctuation will presuppose your ability to recognize these events, and they are designed to improve your punctuation habits. Your study of these paralinguistic categories should, therefore, provide dual benefits. It will give you knowledge about how you communicate orally, and the application of this knowledge should promote your effectiveness on the written page.

We will first define some of the terms that you will need to be able to talk about paralanguage, and then we will provide you with an opportunity for some practice in recognizing the events which these terms describe.

4.4

VOICE SET. This term refers to the overall qualities of a person's voice. These are determined by such facts about the individual as his sex, age, state of health, body build, rhythm patterns, his position in a group (status in the pecking order), his mood, physical condition, location while speaking, and other such factors. Even linguists have not devised a system or a symbol for each of these factors because they are so highly individual and combine in so many ways as to make this an extremely difficult task. Before a linguist would attempt to record the paralanguage used by an individual in a particular speech situation, he would describe the person's voice set as a general background on which to base a more detailed record of what transpired. The following might serve as a typical introductory paragraph covering a speaker's voice set.

> "Mrs. Canfield is a small woman of 35 years who has a high-pitched, musical voice. At times her voice is so high as to be irritating. At the time of the interview, Mrs. Canfield was in a very excited and irritated condition. She is normally very energetic, and on this day she was not able to sit still or to stop talking for more than a very few seconds. She used a patronizing tone to the doctor, indicating much more interested in her description of her own symptoms to him than she was in his diagnosis of what they might indicate."

4.5.

VOICE QUALITIES. In addition to voice set, which is an attempt to describe the predominant predispositions of an individual's voice, voice qualities are also concerned with the overall or background characteristics of an individual's voice. In contrast to voice set, however, the voice qualities refer to those characterizations of speech which may extend over a short speech or even a small part of one utterance. In regard to voice qualities, linguists talk about such phenomena as pitch range (which is the spread of pitch, and can be both narrowed or widened, upward or downward); vocal lip control (which may range from a heavy rasp or hoarseness through a slight rasp or various degrees of openness); glottis control (which deals with the type of transition in pitch, and may be sharp or smooth); articulation control (which may be forceful and precise at one end of the continuum, or relaxed, even to the point of slurring, at the other end); rhythm control (which refers to the way in which portions of speech are set off as units -- the basic rhythm may range from smooth to jerky); resonance (which may range from a deeply resonant voice to one that is very thin); tempo (which may be increased or decreased from an individual's norm).

Notice that in the description of these voice qualities, the terms refer to extremes. Most of the examples of paralanguage that you will daily hear as you listen to speech will not involve such extremes. If we attempt the task of cataloguing the paralanguage used in a particular utterance, we would indicate which extreme was being approximated and the degree of the paralinguistic inclination in that direction.

4.6.

VOCALIZATIONS. These are actual, specifically identifiable noises or sounds or aspects of noises. Contrast these with the voice set or voice qualities which we have been discussing up to this point. Though these are sounds used in speech, do not confuse them with actual language. Long before the scientific study of language, observant people were concerned with the problem of trying to describe certain sounds which are used in accompaniment with language and with every human language that has ever been discovered. Vocalizations may be divided into three sub-categories. The first of these is vocal characterizers, which may cover, or co-occur with, a large segment of speech, or which can occur between bits of language. In this category are such events as laughing or crying. They can occur in accompaniment with speech, or they can be "talked through", as talking through a laugh or through a sob. Other examples of events in this category are yelling, whispering, moaning, groaning, whining, belching, yawning, or having a break in your voice. The descriptive terms you have just been given are, again, respresentative of extremes; and if we were to carefully document the vocal characterizers used in a particular utterance, we might want to be more precise and use such terms as whimpering, sobbing, giggling, snickering, or muttering. Another division of vocalizations is called vocal qualifiers. Again, vocal qualifiers may apply to a comparatively long utterance or to a part of one word. The vocal qualifiers refer to three particular phenomena. The first of these is intensity or loudness, the second refers to pitch height, and the third to duration. In intensity, three degrees of overloudness or oversoftness are distinguished. Variations from the norm in pitch height are labeled by three degrees of overhigh or overlow use of pitch. Likewise, three degrees of drawl and three degrees of clipping mark departures from the normal use of duration or extent.

4.7. The final category of vocalizations is VOCAL SEGREGATES. These are actual utterances which somewhat resemble language but are not a part of the actual linguistic system. The most common of these are such things as "uh-huh", "sh", and clicks. Many of these have a sort of parallel in the phonemic system of the language, and their basic position of articulation can be indicated through reference to a phonetic chart as in M-HM. To distinguish these paralinguistic utterances from the actual use of phonemes, we may desginate these paralinguistic segregates by the use of capitalized symbols. Ǝ would stand for the paralinguistic use of "uh... uh...uh..." as when a person is trying to think of what he would next say. We also desginate clicks by 'c , an indrawn breath by ≯ and an exhaled breath by ≮ . A vocal segregate which will be important in our later discussion of punctuation is the vocal segregate of silence. The way in which speech is interrupted with a complete silence is often important to the communication. Such a significant unit of structure, which is the non-occurrence of sound, is symbolized by Ø .

To summarize our definition of terms, then, we first refer to voice set, which is a basic characterization of a person's general speaking patterns and his adaptation of them during a particular utterance or discourse. Voice qualities may apply to longer or shorter parts of a discourse, and refer to a basic modification of speech patterns such as raising or lowering the overall pitch range, changing the tempo or rhythm, articulating with precision, or slurring, etc. Vocalizations are divided into the categories of vocal characterizers, such as laughter, crying, moaning, etc.; vocal qualifiers, such as the degrees of overloudness, overhigh pitch, or drawl; and vocal segregates, such as M-HM, inspired breath, ≯ , or a vocal segregate of silence Ø .

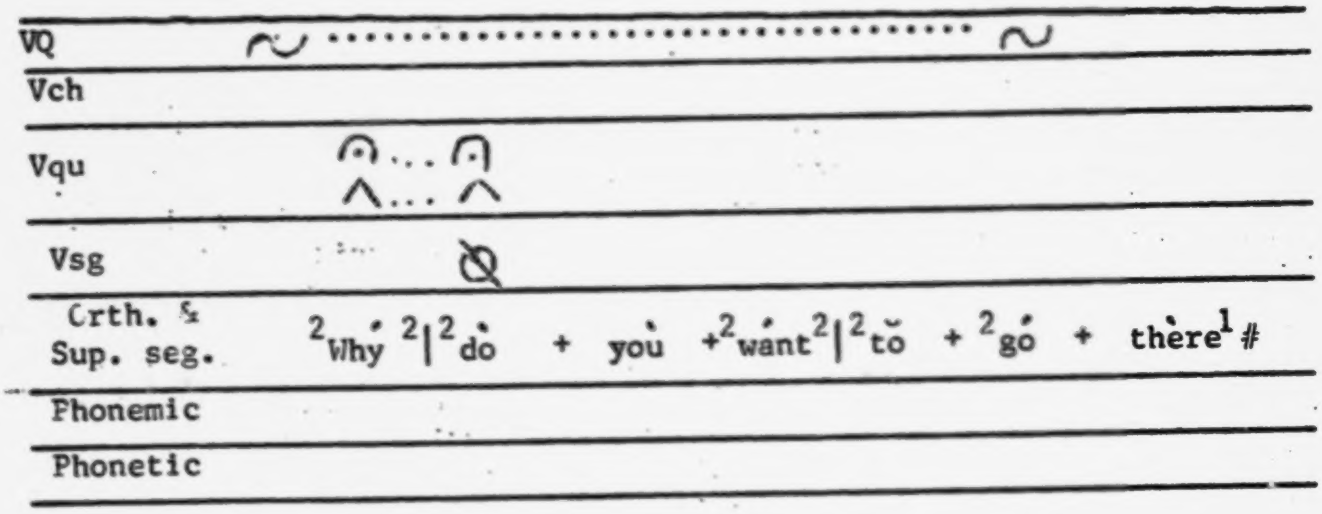
This presentation of paralanguage and kinesics is based, in large measure, on George L. Trager's article Paralanguage: A First Approximation, from Volume 13, Studies in Linguistics, which was published at the Department of Anthropology, State University of New York at Buffalo, 1958. It represents the system for describing paralanguage and kinesics devised jointly by Professors Trager and Henry Lee Smith, Jr., Norman A. McQuown, and Ray L. Birdwhistell.

4.8. To demonstrate how linguists transcribe paralanguage, we will provide you with two examples. You are NOT expected to learn to transcribe paralanguage with this kind of detail. You might prepare such a transcription for your use if you were a professional linguist working with a psychiatrist to help him determine which subjects were emotionally significant to the patient, perhaps out of his conscious awareness, or if you were trying to aid the psychiatrists in determining at which point the patient was consciously or subconsciously lying. The points at which the paralanguage changed, or became in any way unusual, might be worth special attention by the psychiatrist-social anthropologist team.

Example One is a demonstration of relative neutral paralanguage. By this we do not mean that paralanguage is absent. Paralanguage is always present, but this is an example of what the individual normally sounds like. We refer to this as the baseline. It is used as a point of departure. Now listen to the tape of Example One.

Example One:

Voice Set. Adult male, good health and condition. Reasonably clear speech. No evidence of unusual emotional state. Matter of fact manner. Seemingly ordinary speech for this individual. Minimum of paralanguage. Seems to be close to the individual's baseline.



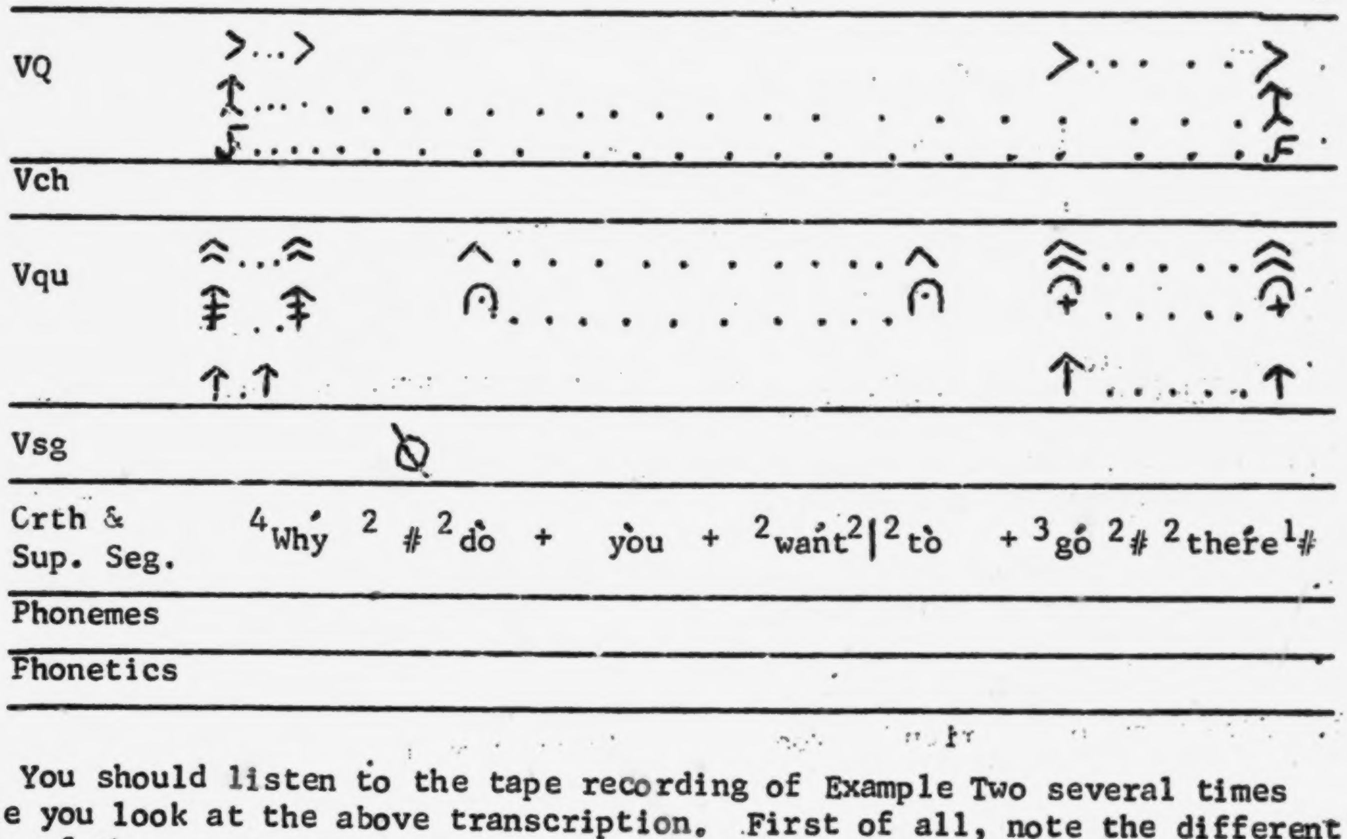
Abbreviations

Orth - orthography
Sup. seg. - suprasegmentals
Vsg - vocal segregates
Vqu - vocal qualities
Vch - vocal characterizers
VQ - vocal qualifiers

The central line of paralinguistic transcription is that which bears the normal orthography and the suprasegmentals. Notice that below this there are lines for phonemic and for phonetic transcription. These lines are usually used only when there is something unusual about the individual's use of the segmental phonemes which the transcriber feels should be recorded. Switching back and forth from one dialect to another would be an example of when it would be significant to record the individual's phonemic selections. On the first line above the orthography we have space for inserting any vocal segregates used. In this case, the only vocal segregate that appeared was a brief segregate of silence following why. If the individual had said "uh...huh", this would have been recorded on this line as H...H H, in the appropriate place. It would not be recorded on the orthography line. On the next line above, the vocal qualities are recorded. Here we find two. ∧.....∧ means that there was one degree of overloudness (more than the individual's usual use of primary stress) on the word why. ⌒.....⌒ means that there was also one degree of drawl (prolongation) on this same word. No vocal characterizers were recorded. ~.....~ means that the rhythm was evenly paced throughout the whole utterance. Now listen to the same individual read the same sentence with a different use of paralanguage.

Example Two

Voice Set. General description of the individual's voice would be the same. However, in this sentence, there is agitation expressed through overloudness, deliberateness of manner, and a prolongation of the whole utterance.



You should listen to the tape recording of Example Two several times while you look at the above transcription. First of all, note the different usage of the suprasegmentals. The vocal segregate of silence, ∅, remains in the same place. On the level of the vocal qualifiers, ↑ .... ↑

indicates that on this part of the utterance there is paralinguistic overhigh pitch, higher than that which would be expected from the use of the suprasegmentals. ‡ indicates three degrees of prolongation or drawl, † indicates two degrees of drawl; and ◠ indicates one degree of drawl. ^ indicates one degree of overloudness, ︽ indicates two degrees. On the level of voice qualities, ℱ indicates forceful articulation throughout the utterance. > indicates, over the parts affected, a decrease of the tempo or rhythm of the sentence; this is in addition to the drawl recorded on a different level. ⤉ indicates pitch spread upward from the norm, also throughout the utterance.

Such a painstaking notation of paralanguage is not necessary for your purposes. In the following exercise, you will be asked to focus your attention only on certain phenomena, and you will not be asked to learn any of the above symbology.

Exercise One

1. He's known since I arrived.
2. He knew since I arrived.
3. There's a man there.
4. There, there's a man.
5. He treated the Indians who were sick.
6. He treated the Indians, who were sick.
7. The whale, we are told, is a mammal.
8. The whale is a mammal, but the shark is a fish.
9. A woman, with two small children, entered the bus.
10. Man dies as he lived -- alone.
11. Like a clown at a fair, we are full of amazement and rapture and have no thoughts of going home.
12. Like a clown at a fair, we are full of amazement and rapture, and have no thoughts of going home.
13. John, the king is dead.
14. John, the king, is dead.
15. Harry, my best friend, stood by me in my trouble.

UNIT FIVE

EFFECTIVE ORAL COMMUNICATION

Introduction

5.1. Goals of Oral Communication. The goal of effective oral communication is to select sets of proper dialect, paralanguage and kinesics that will allow you to communicate intentionally and purposefully in a particular situation, such as conversation, introductions, interviews, discussions and speeches. You already use dialects, patterns of paralanguage and patterns of kinesics. Discovering this is like finding out you've been speaking prose all your life. But notice the word "intentionally" in the first sentence. You first learned these three systems largely through imitation, first of your parents, then of other people around you. Thus much of the "why and wherefore" of your speech package escapes you because it operates out of awareness, and you often communicate unintentionally. Therefore, we shall now point out guidelines for the selection of appropriate dialect patterns, paralanguage patterns and kinesic patterns to fit specific social situations, and to set up laboratory classroom activities in practical application of principles to carry into "outside" speaking situations.

By now you are aware of what dialect is because it was discussed at length previously. Nonetheless, let us briefly restate that dialects vary by geographical area (New England, Midwest, Central Atlantic, etc.), by occupation, by economic status, by education, by age groups and by sex. Dialect covers the levels of phonology (sound); morphology: morphemics (shapes) and syntax (phrases, sentence patterns); and semology (style selection, structural meaning). The term paralanguage covers voice set, voice qualities, vocalizations and vocal segregates. Kinesics refers to the use of the body and parts of the body in communication.

Dialect Choice

5.2. American Standard Dialect. That there is a standard American dialect should by now be apparent to you. It consists of mutually agreed upon limits of pronunciation, inflection, vocabulary choice and word order beyond which speakers of American English do not go. The greatest leeway is granted in pronunciation; less is granted in vocabulary choice; and least variation is allowed in word inflection and word order.

There are usage levels in the Standard dialect as there are in all other dialects: formal, general, and unacceptable. Formal is the level of dialect selection to be found in such things as legal documents, insurance forms, and religious ceremonies. The general level is that of the mass media of communication. Unacceptable is any usage that doesn't fit into American Standard. Your communicating falls almost wholly within the general level, with occasional slips into unacceptable.

Below are a few phonological, lexical and syntactic forms that are part of general usage in Standard American dialect:

Phonological

house	/háws/ /hǽws/ /hə́ws/ /héws/	Mary	/mérĭy/ /méyrĭy/ /méhrĭy/ /mǽrĭy/
wash	/wáš/ /wɔ́š/ /wɔ́hš/	bottle	/bátɨl/ /báʔɨl/

Lexical

car
auto
automobile
motor car

tractor-trailer
trailer truck
semi-trailer
semi
trailer rig

soda
pop
tonic

andirons
fire-irons
fire dogs

couch
sofa
divan
davenport
settle
settee

Syntactic Forms

It is I
It's me

Who do you want?
Whom do you want?

Who do you trust?

due to
because of

Who me?

How about it?

What about me?

there is
there are

everyone----his
everyone----their

nowhere to turn to

put up with

5.3. Local Geographical and Social Dialects. You are well aware that you change clothing to fit different social and business situations. In some cases, as at the swimming pool or in the grease pit, specialized clothing geared to the needs of the moment is called for. At other times you dress according to cues taken from your evaluation of the formality of the forthcoming situation. Here are a few:

school day
school day - appearance in assembly
school day - new girl friend / boy friend
dance - Hi-Y
dance - sock hop
dance - senior ball
picnic - buddies
picnic - double date
picnic - adults
interview for college or job
church - Saturday or Sunday
dining out - lunch counter
dining out - church supper
dining out - fine restaurant with date and/or parents

To you, each of these situations will differ from all the others, and the need for changes of formality in dress and appearance will be apparent. Further, it is apparent that people of different ages and sex dress differently. Just so, no one American Standard dialect selection of language is going to stand you in equally good stead in every situation. The shop, garage, chemistry lab, and playing field have their own vocabulary items suited particularly to them. There are just as obvious differences in dialect selection and level of usage in various other situations:

bull session with close associates
conversation with acquaintances or in mixed company
organization (club, youth group, class) discussion
conferences with teachers, principals, ministers, employers
interview for job or college
speeches of varying formality before social groups, school groups or church groups
introductions of varying formality

You can see that each of these calls for a shift in dialect patterns. There are times when the general usage level of a local dialect is considered perfectly acceptable, even desirable - in situations in which "he don't", "I (you) ain't", "I seen", "he come"(past tense), "I give"(past tense), "it don't make no difference", "brung" or "brang" for brought, "I've got a cousin by (instead of in) Lancaster", and "He's right,ain't it" are usable. These might be used in your home or anywhere in the community where your local dialect is permitted. A warning -- if you were "brought up" on the standard dialect, do not use unacceptable syntax to "talk down to" people who do not use it, since there are patterns in all local dialects which are just as binding as those in the standard dialect. You cannot pick up chance phrases and use them out of context without getting caught and possibly embarrassed. This applies as surely in using your own social or occupational dialects as in trying to imitate another regional dialect by using a few chance words and phrases. By analogy, imagine yourself memorizing a few trade terms like oscillator, capacitor, ohms, variable condenser, and impedance match and then walking into a hi-fi store and posing as an expert.

Usage levels apply also to vocabulary choice within any dialect — local, social or standard. This is not a matter of pronunciation but of actual vocabulary selection. First, of course, there is a class of words generally considered unprintable and unspeakable. We are all aware of these and realize their extremely limited usefulness. Interestingly, styles change by time and place, and some of these words from time to time drift back and forth across the acceptable-unacceptable line. However, our main concern here is not with the sensational words. We are primarily interested in the question, "Are there words in the standard dialect, varying from locale to locale, the use of which will mark you as an outlander or an illiterate?" There are, but the lines are neither so well defined nor so firmly held as at the level of syntax.

A striking example of such word use by geographic area lies in the words branch and creek. While creek is quite general, the other is so highly regional(South and Southwest)that the Northeasterner will draw a blank on hearing it. Other examples of words likely to draw blanks when used outside their geographical areas are stoneboat, hay mow, tarvy, whiffle tree, tonic and mosquito hawk.

Occupational dialects, too, as noted earlier in this unit, have in their lexicons items of specialized meanings which exclude outsiders. For example, auto enthusiasts speak in terms of pots, mills, racing-cams, high speed rear ends and other items with specialized meanings. Among the members of this sub-group the terminology is meaningful and acceptable, but if the insider begins carrying on with these terms to outsiders, he is likely not only draw blanks but also to build resentment among his listeners.

The male-female dichotomy in our dialects becomes apparent in the obscurity of the terms gather, gore, dart, plaquet, shirred, smocked, appliquéd and tuck to the average male. They are all terms easily recognized by females in our culture. What could be more boring or irritating to the average male than to sit and listen to these "in-group" terms among a group of females?

Consider one more set of examples, those of generation (age) differences. Vocabulary items change with the passing years for many reasons: changes in technology, changes in ways of looking at the universe, changes in the ways we look at ourselves and other people, to name a few. For example, few people except scholars any longer use or recognize such terms as arbalest, Spanish boot, or flogiston. It is striking how rapidly from one generation to the next some terms become dated and mark the user as "quaint" or just a trifle behind the times. Consider the following items:

sailor straw
fedora
knickers
plus-fours
motor (verb)
wheel (bicycle)
flivver
rumble seat
tin-goose

fender well
aerodrome
wireless
razor-strop
ice-box
running board
flying machine
cravat
hot (now cool)

How many of these are familiar to you? The point has been made. There are vocabulary items that lie outside the Standard American dialect and set their users apart in space, time, occupation and sex, among other things. While these are all acceptable to the "in" group in any context, when the situation involves a mixed group it is better to avoid specialized or dated vocabulary and to try to adjust to a more general vocabulary.

Generally, the greatest permissiveness in the standard dialect is found in pronunciation. But in local dialects and social dialects pronunciation is often highly prescribed. Often people in a given region make a strong prohibition against deviant pronunciations of words. For instance, in western New York the accepted pronunciation of genuine is /ǰényŭwɨ̀n /, and the pronunciation /ǰényŭwàyn / is thought to mark an ill-spoken person. In the South east the second pronunciation is quite acceptable. In the case of /krík/ versus /kríyk/ for creek, the situation is almost reversed. In the Southeast, /krîk/ is the unaccepted pronunciation, whereas in western New York some "kidding" goes on about it, but it is acceptable. Apparently pronunciations acceptable to one region are not always universally agreed upon. A rule of thumb would be to use the pronunciation pattern of your own local dialect even when speaking the standard dialect, and particularly the pronunciations of the social or educational level you wish to represent. People outside your area will generally accept your pronunciations if they fit into your over-all pattern of dialect selection.

Least variation from dialect to dialect and within the standard dialect seems to occur in syntax. Seldom if ever will you come across a situation in which hit bill john or bill john hit or john hit bill occur with the meaning "Bill hit John". But you will find acceptance in some local dialects of word order patterns that will seem strange in the standard dialect. "How is you", with the answer "I's fine," is standard on Tristan da Cunha, and in some sections of our country. What is accepted general usage in one local or social dialect may be totally unacceptable in other dialects and/or the standard American dialect.

You have seen from the examples in the preceding pages that there is considerable variation in pronunciation, word choice, and word order from one local dialect to another and from one social dialect to another. It has also been pointed out that in the majority of situations one should use the dialect spoken by the people with whom he is trying to communicate. A local geographical dialect is perfectly acceptable in the area where the majority of the people communicate by means of it. A social dialect -- e.g., an occupational dialect -- is acceptable when communicating with the specialists in that field. In any case, when there is doubt about which dialect to use in order to communicate fully, the standard dialect should be used. We will discuss specific situations demanding specific types of dialect in the last part of this unit.

Paralanguage and Kinesics

5.5. The Range of Paralinguistic and Kinesic Performance in the Standard Dialect. Both paralanguage and kinesics go hand in hand with language in its various dialect forms and on the formal, general and unacceptable levels of usage. Following is a description of these two systems as they are used with the standard American dialect in situations of varying degrees of formality.

5.51. Voice Set. This is the over-all set of your voice which is dependent on age, sex, physical condition, mood and self-image. Over all these factors you have little control, except for altering the image slightly to act a part temporarily, as an actor does in a play.

5.52. Voice Qualities. These consist of pitch range, vocal lip control, glottis control, articulation control, rhythm control, resonance and tempo. Your use of these qualities depends on the following things: The nature of your physical equipment, whether or not you exercise conscious control of this physical equipment, your own self-image, and the image you wish to project, as well as the relative formality or informality of the situation. The patterns are not so well defined as are patterns of language usage, and guide lines are accordingly harder to set up. If a person's usage is so poor that he gets almost no intentional message across, he needs a speech clinician. However, our purpose is not speech therapy, but a general discussion of what goes on paralinguistically and kinesically and how to apply the knowledge consciously.

Your personal pitch range is dependent on your sex, age, physical condition and physical equipment. These factors determine the length, thickness and tension of your vocal lips or folds. About these you can do nothing but make the most of what you have. If you feel that you are presently not making as good use of them as you might be, you can find your most comfortable pitch and use it as your base-line in speaking (pitch 2). An easy away to do so is to sing up and down the scale of a piano until you find the note that you can sing the loudest with relative ease. That is your best or optimum pitch.

With regard to the width of your pitch range, the larger the group you are addressing and the larger the room in which you are talking, the wider the range will need to be. You will be using the four linguistic pitch levels described in Unit III, but they will grow relatively further apart. Think of the extremes; first imagine an intimate conversation between you and a close friend, and then picture yourself addressing an auditorium full of people.

You have little direct, conscious control over the actual bringing together of the vocal lips. However, the relative tenseness or laxness with which they are brought together is affected by the degree of tenseness or laxness in the neck while you are speaking. In our culture the most acceptable degree of tenseness lies between that which gives an impression of breathiness, and that which sounds brassy or strident and eventually leads to hoarseness. If you wish to exercise some control over this and wish to reduce some of the strained feeling from yelling, think of the energy for your voice as coming from your abdominal muscles rather than from your neck region.

Glottal control refers to the relative smoothness of the pitch changes as you go up and down the scale when you speak. As a rule of thumb, the more relaxed you are when you speak, the smoother this pitch change will be.

Articulation, the physical formation of the speech sounds, is definitely within the domain of your conscious control. Your over-all articulation pattern can be as precise or lax as you wish. Also, the general rule of acceptability within the standard American dialect is that the more formal the situation, and/or the larger the audience, the more precise you are expected to be. In addressing a large group, the need for precision in articulation is apparent; if you are not precise, you will not be understood.

By vocal characterizers we mean crying, laughing or the breaking of the voice stream. We could impressionistically say they are indicators of a mood that is temporarily overwhelming. People in our culture generally tend to steer away from such extreme mood indicators in rational situations because their presence indicates that the speaker has temporarily lost control of himself. Tears and laughter can be used deliberately on occasion, but this requires much practice, and a little bit goes a very long way.

Over- or under-loudness, very high or very low pitch and extreme clipping or drawling are called vocal qualifiers. They are strong indicators of deviation from calm, rational thought; as a deliberate device, they should be used very sparingly.

5.53. Vocal Segregates. As you remember, these are the occurrences usually represented as uh huh (yes), huh uh (no), M-M-M (maybe, good, too bad), tch or tsk (too bad), huh? (question), uh(Hang on, I've got more to say, but I haven't got it figured out), ah (satisfaction). These are acceptable in intimate and small group situations on the informal and general levels of speaking, but their frequent use is not acceptable in large group situations or in formal situations.

5.54. Resonance. By changing the size and shape of the pharynx and mouth cavity, the resonance of the voice may be changed to a limited extent. Resonance is that aspect of voice that most people impressionistically refer to as voice "quality". It is possible to emit most of the stream of voice through the nasal passage, to keep any of it from flowing through the nasal passage, or to strike a balance between the flow of voice from the nasal passage and the mouth. Generally the third of these is preferred in most speaking situations.

5.55. Rhythm and Tempo. The demands in these two areas change rapidly and constantly in terms of formality of the occasion and the mood the speaker desires to project. For instance, a smooth rhythm and a slow tempo are thought to be well suited to the formality of a graduation exercise, but a staccato rhythm and a high speed delivery may be better suited to the needs of the coaches on the sports field.

5.6. The Range of Kinesic Performance in the Standard Dialect.

5.61. Body Set. This refers to the overall impressions of age, sex, mood, health status and self-image conveyed by a speaker. Within a limited range, these impressions can be altered by amount of muscle tension , relative slouch or relative rigidity. Kinesics also includes specifically the use of hands, arms, legs and face. Students of kinesics even divide the face into smaller areas.

We have not the space to discuss fully how to achieve the most desirable kinesic effects. Here is one broad suggestion: practice before a mirror and watch other people, see how certain effects are achieved by yourself and others, and then put into practice those kinesics you find valid in any particular situation

The Dialect, Paralanguage and Kinesics

Checklist

5.7. In every social situation from the most informal kind of conversation to the most formal type of interview or public oratory, one must make a choice of the proper dialect and the proper paralanguage and kinesics to accompany that dialect. It is possible to set up a checklist of points for these three major categories that the speaker must consider, consciously or unconsciously, if he is to make the impression he wishes on his audience, be the audience one person or hundreds. In the following sections of this unit we will discuss specific social situations and the range on the checklist within which a person should normally operate in order to get his message across most effectively. In classroom exercises you will find it helpful to study the range of selection on the checklist accompanying the discussion of each type of situation. We will omit kinesics from the individual exercise checklists because exact kinesic perfomance is hard to prescribe.

LANGUAGE PERFORMANCE

1. Dialect choice: Standard____Local ____ Social ____
2. Usage Level within the dialect choice: Formal ____General ____ (Unacceptable should be avoided in all social situations)
3. Pronunciation: Standard for area ____Non-standard ____
4. Vocabulary choice: Standard dialect items ____ Local dialect items ____ Social dialect items ____
5. Sentence structures: Standard ____Local ____ Social ____

PARALINGUISTIC PERFORMANCE

1. Pitch Range : Monotone____Narrow____Wide____ Low____ High ____
2. Vocal Lip Control: Tense ____ Normal ____ Lax ____
3. Glottis Control: Smooth ____ Not smooth ____
4. Articulation: Careless ____Normal____Precise____Over-precise____
5. Vocal Characteriszers: Crying____Laughing____Breaking ____ Whispering____
6. Vocal Qualifiers: Over-loud____ Medium____ Under-loud ____ Over-high ____Medium ____ Oversoft____
7. Vocal segregates: Overused____Present____Not present ____
8. Resonance: Muffled ____Nasal ____ Medium ____ Emphasized ____
9. Rhythm and Tempo: Smooth rhythm ____ Slow tempo ____ Medium rhythm ____ Medium tempo ____ Jerky rhythm____ Rapid tempo ____

KINESIC PERFORMANCE

1. Body set: Congruent____ Incongruent ____
2. Arm and Hand: Congruent____ Incongruent ____
3. Shoulders: Congruent ____ Incongruent ____
4. Face: Congruent ____ Incongruent____

GENERAL COMMENTS:

The Situations

5.8. The Problems of Subject Selection, Timing and Audience Relationship. The topic of subject selection covers the problem of what to talk about. Each type of social situation presents this problem in a different way, depending on the formality of the situation. However, there are four basic considerations to use as guidelines in subject selection:

a. Purpose
b. Ability
c. Interests
d. Identity

Each of these will be treated more at length as we discuss each situation, but there are some general features applicable to each. Purpose covers the reason for the specific situation, ranging from the primarily socializing motivation of most conversations through the primarily informational or persuasive purpose of the formal speech. The question is, why have these people come here? Ability refers to both your ability and your listeners' ability. What areas of knowledge do you have information on? what ideas and language are you and your listener(s) able to handle? Interests means your interests and the interests of your audience. What things do you care about? What things do the listeners want to hear about? Identity signifies who you are in relation to the audience. Also, who are they in relation to you and in relation to each other? This concept of identity will aid you not only in subject selection, but also in establishing what kind of image of yourself you will try to present to the audience through language, paralanguage, kinesics and dress.

Except for conversation, for which you could say that you are constantly preparing through daily experience or that you never prepate, you will be given both a limited time for preparation and a limited time for the presentation of any oral communciation. For example, for an interview your appointment will be made one day, several days, or even some weeks in advance. The time factor will obviously influence the scope of your subject selection.

Regardless of which speaking situation you find yourself in — conversation, interview, introduction, discussion or speech — you face the need to make your audience relate to you sympathetically enough to listen to what you have to say, and, hopefully, also believe you. Use the questions enumerated under "D" of subject selection. Also, go through what has already been said under dialect selection and paralanguage and kinesics, since the points made there can rapidly influence the response of the hearer to what you have to say.

5.9. The Use of Audio-visual Aids. These are sight and sound helps to help you make your speaking clear and forceful. The aids used may range from the conversation-piece or ice-breaker of the social gathering, through the calling cards or business cards of the people you are introducing to each other, to the sometimes elaborate equipment of the scientific experiment lecture. Other audio-visual aids are blackboards, slides, charts, records, models, blueprints, to name a few. We will discuss their actual use in more detail later, but there are potentials and pit-falls in the uses of these aids in any situation. Their greatest potentials lie in the fact that they couple the senses of both sight and sound, help keep the audience's attention on a focal point, and sometimes condense a great deal of information into relatively small space and time. Conversely, their great weaknesses are that they sometimes break down, and that they may be over-used and so distract the audience from the speaker and what he is saying.

5.10. A checklist of Subject Selection, Timing, and Audio-Visual Aids.

SUBJECT SELECTION

1. Purpose
2. Ability
3. Interests
4. Identity

TIMING

1. Length of time for preparation
2. Length of time for performance

AUDIO-VISUAL AIDS

1. Types
2. Mastery
3. Effect

AUDIENCE-SPEAKER RELATIONSHIP

Sympathetic _____ Indifferent _____ Hostile _____

GENERAL COMMENTS:

5.11. The Situation Environment. The primary purposes for participating in these sample speech activities are for you to understand in a practical way what spoken communciation is, and how to use it effectively in getting along with other people. Communication can be defined as the act of sharing with other people thoughts or feelings we have within ourselves. By now you may be thinking,"Well, if that's all there is to it, why all the fuss? I'm doing quite well, thank you." Your reaction would be typical. By the time we are of high school age, most of us handle our language well enough so we usually get the things we need, and want, like food, clothing, entertainment, and the like. For instance , we are all capable of telling others what kinds of things we like and dislike, and we can understand others when they tell us the kinds of things we ought to do. All this is rather basic stuff. But consider how often people get angry over something you don't think you've said, or because they think you mean something you don't mean at all. Also, consider the many arguments you've had, or the "hard feelings" you've had, because you've done the same thing. People often get angry with each other because of paralanguage and kinesics. For example, your mother might tell you to come wipe the dishes. If you don't object, you will say, "Yes, Mother" in one way; if you do object, you will say it in another. The words stay the same, but your different moods are shown by changes in your paralanguage. Often we try to hide our feelings by not saying anything. If we try to hide guilt or secrets or even good news, our kinesics often give us away. Perhpas you have heard some of the following expressions: You look like the cat that ate the canary. You look like a kid caught in the cookie jar. You look as if you'd just lost your best friend. You're as nervous as a cat on a hot tin roof. You're standing on one foot then the other. You look fit to be tied.

Even our dress tells things about us. If someone dresses sloppily, some people say, "He looks like an unmade bed." We say some people's clothes look "hoody", or that certain dress makes people look like "beatniks". Also, if someone overdresses in our opinion, we might refer to him or her as a "clotheshorse", and we might ask, "What's the occasion?" or "Where are you preaching today?"

We now see there is room for improvement, and that we should learn to use language, paralanguage and kinesics deliberately to help intentional communication. Much of this need for improvement comes from the imitative way we learn to speak, which we have already discussed. For instance, if someone were to ask you how you make a given sound such as the /æ/ in cat, it would be a safe bet that you couldn't do it accurately. In the same way, if someone had asked you what you meant by "tone of voice", you would have been hard pressed for an answer before reading these units. Clearly, when we learn things strictly by imitation, we leave much to chance, because we don't learn why a certain way of talking works or how it may or may not be safely altered.

We are also often unaware of vagueness in our speaking. We all say things like, "Hand me up the watchacallit over there that goes on the end of the hoozis." Since we learn through imitation, it never occurs to us that we are not being perfectly clear. We know exactly what we mean, and we assume everyone else will too. For instance, a customer in a meat market, wrapped in thought about the meats on display, has turned to the butcher saying, "I'll take a pound of that." The butcher, of course, was left at a total loss, since that meant nothing to him.

You should view this series of activities as a group of experiments in which you will have certain responsibilities. Your primary responsibility will be to observe both yourself and your fellow students. You should observe the kinds of reactions you get to the ways in which you say things, and you should observe your own reaction to the things others say. Next, as you become aware of vagueness, sloppy thinking, or unintentional offence as problems of language, paralanguage and kinesics, you should try to control your own mannerisms in speech to get the desired results, instead of leaving the outcome to chance. By listening to your fellow students carefully, you gradually become aware that they, like you, believe everyone automatically understands what they are trying to say. You may even see that they also get angry when they are asked to explain themselves more precisely. By the time you have some experience in conscious observation, you should have a good idea why some ways of speaking are effective and some ways are not. We should add, you will probably observe that the way you speak will be governed by the formality of the situation. Your wording must be better organized and more convincing when you deliver a speech before a group than when you are a part of a group in a discussion. The interview may be less formal than the speech, and conversation is surely the least formal (in the sense of rules) form of speaking.

All this admonition to learn conscious control of all phases of communciation is, of course, not for the purpose of making you artificial. The purpose, like that behind most of what goes on in school, is to increase your conscious awareness of yourself and of the world of people around you. Only through such awareness can you become conscious of the patterns of your culture, select those which will help you to grow into the adult you want to be, and learn the cultural restrictions within which you can give fullest vent to your individuality.

5.12. ORAL INTERPRETATION. Oral interpretation is the oral performance of written literature. It therefore includes reading to people, recitation of memorized literature (jokes, poems, anecdotes, etc.) and acting. Of course, the objectives of oral interpretation are to be fluent and convincing and, at the same time, to seem to be giving a spontaneous performance. These objectives contribute toward entertaining and informing others.

We all know how deadly it can be to listen to our fellow students reading fumblingly at their desks. What is the problem? Primarily, it is certainly a lack of preparation. Good reading aloud, like good acting, can be most enjoyable; and preparation is the key. What is preparation? Largely, it consists of re-reading material until it becomes very familiar. Obviously, though, even if you were to memorize the content, you might as well memorize gibberish unless you understand the author's purpose.

Authors construct records to preseve various things. Some of these are real events that have taken place; some are events the authors think should take place; and some are events that take place only in the imagination (for instance, fairy tales and science fiction). There are several reasons for these kinds of writings. First is the obvious purpose of recording events. For many centuries, as you know, there were no movies, tape recorders, disc recorders for preserving records of events. The only way to record was either to draw a picture or to write about the happening, or both. Clearly, the main purpose of writing systems is to record.

However, one of the great pastimes of human beings is to play guessing games. What would happen if ...? How would we feel if ...? So another great use of writing systems developed, that of putting down stories, events that hadn't happened but that might, or easily could happen "if...". Authors also record things that exist in their minds: opinions, ideas, impressions, whatever you to call them. Some of these -- like love, hate, fear, courage and justice -- are very real, but equally intangible. Authors make up symbols for them and weave stories around these symbols. Sometimes these symbols are very realistic, and sometimes they are fantastic. For instance, in many stories a hero symbolizes the author's idea of goodness and courage, and a villain symbolizes cowardice, hate, fear, etc. These people are usually more or less close to real people. On the other hand, authors often have used and continue to use fairies, elves, witches, animals and assorted monsters to symbolize good and bad.

Finally, there is writing whose purpose is that of the material you are reading — explaining or informing. The subject may range from the very specific and concrete to the abstract. Note that our materials include the range. In summary, then, authors record, imagine, and explain.

Now to the second point — how all this is done. Obviously, the author has at his command all the conventions of the writing system. The English writing system has alphabetic letters to represent shapes that form words, and marks called punctuation to reproduce the pauses of speech and to show the beginnings and endings of intonation patterns (capitals for beginnings and periods, exclamation points and question marks for endings). However, the English writing system has had a development somewhat divergent from the development of the language itself. You have seen this reflected in spelling, and you should see it easily in the punctuation system if you reflect on how difficult it can be to get from one end of some sentences to the other without running out of breath. However, the writing system has symbols for more words than you are likely to use in a lifetime,and these words range from unemotional to highly emotional, from "vulgar" to "elegant", from "clear" to "obscure" and from one syllable to several. And the punctuation system makes possible word combinations from one to over a hundred in one sentence, and far more kinds of sentence pattern variations than you are ever likely to use.

Out of these possible patterns, an author selects those which appeal to him in terms of his own reactions, his memories, and in terms of the task before him. For instance, a writer for children is likely to stay closer to common-place words and patterns than is a writer for adults. A technical writer will use words and sentence patterns oriented not only to adults but to adults specializing in his area of knowledge, All these are written differently,in turn,from fiction.

Now you begin to see where you, as the oral interpreter, fit into the process as a presenter of ideas from the work of literature to the audience. The first step in preparation is to select a work to read from. This you do on the basis of purpose, ability, interests, and identity, as already discussed for all forms of oral communication. Next, read the work as a whole. In doing so, check a dictionary for the meaning of words new or hazy to you. Remember, words and sentence patterns are all the author has to work with in conveying a message; and if you are going to do him justice, you must not leave holes in your understanding. Once you feel you understand the work as a whole, begin your re-reading. As you read, notice parts of the work that you find striking either for their clarity, emotion, or beauty; especially notice how the sounds of the words and larger sound patterns contribute to the impact. Look also for the ways in which words work in the sentence patterns. If the author has used words and sentences in ways unusual to you, perhaps he has done it deliberately. The author may be writing dialect as Mark Twain did so extensively and effectively in Huckleberry Finn. He not only wrote in local dialects, but also differentiated among several social dialects. In the following examples, notice the contrast between Huck's conversation and that of Jim.

Huck: What was the use to tell Jim these warn't real kings and dukes? It wouldn't 'a' done no good; and, besides, it was just as I said: you couldn't tell them from the real kind.

Jim: What makes me feel so bad dis time 'uz bekase I hear sumpn over yonder on de bank like a whack, er a slam, while ago, en it mine me er de time I treat my little 'Lizabeth so ornery.

While both dialects are different from those most of us are used to, they are also quite different from each other. Jim's is the dialect of the Negro of the mid-1800's, and Huck's is that of the rural white of the same time and place.

Any strangeness may also be due to the fact that an author is of a time and place different from yours. This is very apparent when you first encounter the writing of Shakespeare, as shown by the speech of the Chamberlain from Act II, scene 1 of the first part of Henry IV.

> Chamberlain: Good morrow, Master Gadshill. It holds current that I told you yesternight: there's a franklin in the wild of Kent hath brought three hundred marks with him in gold:I heard him tell it to one of his company last night at supper; a kind of auditor; he that hath abundance of charge too, God knows what.

You can easily pick out what are to us unusual words; morrow, franklin, hath,and yesternight. But notice also the length of the sentence, and the now-unusual structure used in the second sentence.

Even the works of so recent a writer as Charles Dickens have words and sentence structures that are no longer as popular as they were seventy-five or even fifty years ago. As a result, Dickens works have sound combinations and rhythms that seem faintly odd to some of us when we first meet with them. The example below is taken from the court-room scene of the defense of Charles Darnay by Sidney Carton.

> A singular circumstance then arose in the case. The object in hand being to show that the prisoner went down, with some fellow plotter untracked, in the Dover mail on that Friday night in November five years ago, and got out of the mail in the night, as a blind, at a place where he did not remain, but from which he travelled back some dozen miles or more, to a garrison and dockyard, and there collected information; a witness was called to identify him as having been at the precise time required, in the coffee-room of an hotel, in that garrison-and-dockyard town, waiting for another person.

Notice the sentence length, the syntactic combinations that seem rather odd like "went down....in the Dover mail". The above examples are just some possibilities; you can undoubtedly think of more.

Futher, what intonation patterns suggest themselves to you as you read the work? Look at the punctuation to see how the author guides you. Look to see whether you misread the intonation the first time. Does the author use irony? If so, how does he indicate it? Some works are satires and their over-all tone is one of irony. How does the author use his words and sentences to create suspense (if it is a story), or gaiety, or sadness? Lastly, how will you, as the interpreter of the writing, get these moods across to the audience? Look for word combinations that have a great deal of sound value, and sentence patterns that create certain rhythms. Edgar Allen Poe is famous for this. He has even been known, upon occasion, to use a word in an unusual context because he wanted the sound and image-shaping values of that word in a particular syntactic slot. The examples below are taken from "Bernice" and "The Fall of the House of Usher", respectively. Notice the sound values of the overall sentence sturcture and how each word contributes to the total impact. In the first selection notice also the ironic juxtaposition of white and spectrum, and the punning use of the word indenture. Using the word indenture, Poe evokes images of indent and denture. Compare this use of the word with the dictionary meaning of it. In the selection from "The Fall of the House of Usher", notice the phrase lurid tarn with ominous overtones. Check the dictionary meaning of the word lurid. It seeems to have more associative meaning than concrete meaning. Regard the word tarn. Alone, how much meaning has this for you?

> But from the disordered chamber of my brain, had not, alas! departed, and would not be driven away, the white and ghastly spectrum of the teeth. Not a speck on their surface --not a shade on their enamel -- not an indenture in their edges -- but what that period of her smile had sufficed to brand in upon my memory. (from "Bernice")

> It was possible, I reflected, that a mere different arrangement of the particulars of the scene, of the detail of the picture, would be sufficient to modify, or perhaps to annihilate its capacity for sorrowful impression; and, acting upon this idea, I reined my horse to the precipitous brink of a black and lurid tarn that lay in unruffled lustre by the dwelling, and gazed down — but with a shudder even more thrilling than before — upon the remodelled and inverted images of the grey sedge, and the ghastly tree-stems, and the vacant and eye-like windows. (from "The Fall of the House of Usher")

Check your impressions of the pace or rate of speed of the work when you prepare. These are all things that can help you convey images and meaning to your listeners.

Sometimes in re-converting the written record into language it may be necessary to alter the apparent intonation pattern, either from sheer necessity to breathe or to heighten effect or meaning. There may also be words so obscure that your audience will be left blank upon hearing them, or words you cannot handle for one good reason or another and for which you will need to substitute synonyms. Caution -- you must be sure that you are doing this only out of direct necessity; and if a work needs extensive change for you to be able to handle it, you might better leave it in favor of something you are able to handle easily. Most professional authors are not at all careless in the use of words or sentence patterns, and they usually re-write until they feel they have achieved the best combinations of which they are capable. Your reading can at best only approximate the author 's intent; any toying with words and sentence patterns can easily destroy the intended images and thought of the work.

Now put yourself in the place of an author. This should be easy because, after all, you are one. It is a role we all play from time to time. You too write: letters, notes, essays, short stories, even occasional poems. For some of you, this is solely a part of your school work; for some, it is a hobby, or even a preparation for an eventual career in writing or some other aspect of communication. Regardless of the motivation, many problems of authors are the same. The primary one is to make the reader "see" and "hear". Much of our purpose in this discussion of oral interpretation has been not only to show you the connection between language and the written record, but also to show you, through suggestions of what to look for in other authors, dimensions that will enable you to increase your own clarity and impact in spoken and written composition. It is important to realize that all composition is "sounded out" in our heads; but since we must usually speak on the spur of the moment, with little or no time for conscious preparation, we play down or totally disregard the desirability of composing our delivery by sound.

We have not so far specifically dealt with acting our dramatic literature. Through acting you can gain much practice in techniques of body movements to convey meaning to your audience. You already know what paralanguage and kinesics are. By now you are aware of the fact that, like language, you use them all the time. Do you use them to greatest advantage, consciously aware of what you are "saying" with them and in control of them before an audience? When you act out scenes from plays using language patterns that are not yours and paralanguage and kinesic patterns that are not yours, in an attempt to re-create from the printed page a person markedly different from yourself (which is just what an actor does for a living), you will begin to become sensitive to a wide variety of these patterns. In order to be convincing in a part, you must consciously control these patterns so the audience momentarily forgets you are Joe Oglethorpe or Harriet Winthrop, and is able to concentrate on the feelings, actions and words of the person you are temporarily creating from the black scratches on the paper.

By now you should see some of the application of this kind of exercise. By putting into practice what you have learned in these units about language, paralanguage and kinesic patterns, and their application in composition, you will open for yourself a wide range of these patterns for use in any oral communication.

Here is a list of things to consider in preparing for oral interpretation:

1. Selection
    a. audience requirements
    b. your requirements
    c. time for preparation
    d. time for performance
    e. purpose

2. Cultural Background
    a. locale and time of the work
    b. locale and time of the author
    c. point of view of the author toward his subject

3. Preparation
    a. over-all intent of the work
    b. language
        1) dialect choice(s)
        2) usage level(s)
        3) vocabulary choice
        4) sentence structure(s)
    c. paralanguage and kinesics
        1) voice set
        2) vocal characterizers
        3) vocal qualifiers
        4) vocal segregates
        5) resonance
        6) rhythm(s) and tempo(s)
        7) body set
        8) arms and hands
        9) shoulders
        10) face

4. Presentation
    a. eye contact
    b. paralanguage and kinesics as above

5.13. Discussion. We will talk about two kinds of discussion; group (round table) and panel. These two types of discussion differ a little in their organization and purpose, but they are alike in that the basis for both is problem solving. This is accomplished by bringing out various opinions and pieces of information. By problems we do not mean those that can be solved by referring to text books. There is no point in discussing the date of the signing of the Declaration of Independence because this question and others like it can be answered by looking them up in a book. Nor do we mean problems that can be answered immediately by yes or no. It makes no sense to discuss whether or not the bell has rung to begin the period. Discussion, to be useful, must be restricted to questions as to why a certain thing has happened, or questions of what to do about a given problem, and how to do it.

All discussions require preparation. First, the problem must be identified. Someone must state that a problem exists; for instance, that the roads in the village are in poor shape. Then the problem must be analyzed in order to discover its nature. How bad are the roads, how did they get that way, whom does the problem affect and how? Finally, even before meeting as a group, the members of the group should, on their own, begin to examine possible solutions to the problem. Then, when the time for discussion comes, everyone will have a definite opinion on the problem, even if the opinion is that nothing should be done. Also, the group members will have information to support their opinions. In the discussion there should be a meeting of these opinions, and, at best, a solution will grow regarding what should be done that, in general, will satisfy everyone in the group. This process is known as reaching a consensus. Sometimes a consensus is not possible, so no action may be taken as a result of a discussion. This does not make the discussion worthless, because each person has learned more about the problem than he knew before and he will know more about the other people in the group than before.

Every discussion needs a leader. No group of people without a leader will arrive at a satisfactory solution to their problems. Without a leader, a discussion will go off the track. Some people may talk all the time, and others may not talk at all. The group may also get bogged down on one point and not cover the whole question. The discussion leader's duties are to introduce the topic, to make sure that everyone is heard, to keep the discussion pointed, to keep moving over the various points, and to summarize the conclusions reached.

The specific purpose of a discussion dictates its organization. A group discussion is organized around a group of people who are equally informed about a common problem and whose opinions are assumed to be equally valid. The people are usually arranged in a circle so that each may be seen and heard equally. Sometimes, because of the number of people involved in a problem, this is impossible. Also, a problem may be so technical that the majority of the people connected with it may not have the opportunity to become familiar with all its details. In either of these two situations, a panel is a better way to organize discussion. A panel consists of a few people (usually no more than seven) who are very well informed about the problem. As a group, they appear before an audience of people also concerned with the problem, but not as well informed. The panelists and the moderator are seated in a line in front of and often slightly above the audience. After the panelists have covered the topic, the audience may be invited to question or challenge their conclusions. Here, too, the role of the moderator is important because he is the go-between; all the audience's questions are directed at the panel members through him.

When you get to exercises in discussion work, it would be interesting and helpful to assign definite roles to certain discussants. You might select one person to argue against any positive proposal that is made and another person to "spread oil on the troubled waters" by seeking a compromise between divergent opinions. There can also be roles for people to represent definite interests. For instance, if you were to present a discussion of the question "How Can We Improve the Economic Life of East Snowshoe, New York?", the roles might be those of the banker, the professional (doctor, lawyer, educator, etc.), the small manufacturer, the homeowner, the merchant, the laborer, a worker, and others who might occur to you as you review the number of possible interests involved. Already you realize that one person might be a member of more than one interest group, perhaps even a member of two conflicting groups.

EXERCISES

I. To make the organization of the discussion easier, the class should be divided into groups of ten or fewer students. Each group's topic should fit the following points:

1. Is it a why or how question?
2. Is it of concern to the whole group?
3. Is information readily available?
4. Can it be handled in the allotted time?
5. Can the group prepare in the assigned time?

II. Select a discussion leader you think can do the following things:

1. Introduce the topic
2. Make sure everyone is heard
3. Keep order
4. Keep the group to the point
5. Keep the discussion moving
6. Summarize gradual progress and the conclusions (Sometimes a recorder is appointed to keep track)

(Only experience will tell you whether you were right or wrong here.)

III. Each group will discuss it's question group-style and the members will observe the following points:

1. How did the group perform in reference to the six points in Section II of the exercise?
2. Which people tended to dominate the discussion? Why?
3. Which people tended to say nothing? Why?
4. Which people distracted from the points at hand? How?
5. Did the question fulfill the requirements in Section I of the exercise?
6. Were conclusions reached?
    a) Were they sensible?

b) Did they grow naturally out of the discussion?
c) Were they really a reflection of the majority opinion? or even of a consensus?

IV. Let groups prepare as for the previous discussion, then present a panel discussion. Be prepared to present your observations on the following points:

1. Was there evidence of good preparation?
2. Were the panel members reasonable or excitable?
3. Did the moderator fulfill his duties?
4. Were the panelists able to answer the questions of the audience reasonably?
5. Did the members of the audience ask reasonable questions?
6. If not, how well did the moderator turn the questioning to another line?
7. Was there any manner of speaking in evidence that appealed to you as one you would like to follow for yourself? What was it?
8. Why do you like it?

V. Write out ten discussion questions of your own that you feel meet the requirements we have given.

VI. Observe a discussion group or panel either "live" or on television and report on the following points:

1. Did any manner of speaking so disturb you that you found it difficult to accept what was being said?
2. What bothered you? why?
3. Was there any speaking that appealed to you? If so, why?

VII. Write a 200 word evaluation of your own behavior in a discussion group. Don't be afraid to say something good about yourself.

Checklist: Roundtable-General

Language:

1. Dialect: Standard __x__ Local __x__ Social __x__
2. Usage: Formal ____ General __x__
3. Pronunciation: Standard for area __x__ Not standard for area ____
4. Vocabulary: Standard __x__ Local __x__ Social __x__
5. Sentence Structure: Standard __x__ Local __x__ Social __x__

Paralinguistic Performance:

1. Pitch Range: Narrow ____ Normal __x__ Wide ____
2. Vocal Lip Control: Tense ____ Normal __x__ Lax ____
3. Glottal Control: Smooth __x__ Not smooth ____
4. Articulation Control: Careless ____ Normal __x__ Precise ____
   Over precise ____
5. Vocal Characterizers: Cry ____ Laugh ____ Break ____ Whisper ____
6. Vocal Qualifiers: Overloud ____ Oversoft ____ Medium __x__ Overhigh ____
   Overlow ____ Medium __x__
7. Vocal Segregates: Present __X__ Not present ____
8. Resonance: Muffled ____ Nasal ____ Normal __x__ Emphasized ____
9. Rhythm and Tempo: Smooth __x__ Slow ____
   Medium __x__ Medium __x__
   Jerky ____ Fast __x__

Subject Selection:

1. Purpose: Problem solving-mutual information
2. Ability: Low to high
3. Interest: Average to strong
4. Indentity: Members of the group

Timing:

1. Preparation: Date of gathering
2. Presentation: Time allotted to discussion by mutual consent of group members

Audio-Visual Aids:

1. Types: Still pictures ____ Charts ____ Models ____ Movies ____ Records ____

Checklist: Panel Discussion-Specialized

Language:

1. Dialect: Standard x Local x Social x
2. Usage: Formal ____ General x
3. Pronunciation: Standard for area x Not standard for area ____
4. Vocabulary: Standard x Local x Social x
5. Sentence Structure : Standard X Local x Social x

Paralinguistic Performance:

1. Pitch Range: Narrow ____ Normal x Wide x
2. Vocal Lip Control: Tense x Normal x Lax ____
3. Glottal Control: Smooth x Not smooth ____
4. Articulation Control: Careless ____ Normal x Precise x
   Over precise ____
5. Vocal Characterizers: Cry ____ Laugh ____ Break ____ Whisper ____
6. Vocal Qualifiers: Overloud x Oversoft ____ Medium x
   Overhigh ____ Overlow ____ Medium x
7. Vocal Segregates: Present x Not present ____
8. Resonance: Muffles ____ Nasal ____ Normal x Emphasized x
9. Rhythm and Tempo: Smooth x Slow ____
   Medium x Medium x
   Jerky ____ Fast x

Subject Selection:

1. Purpose: Problem solving and informing
2. Ability: Panelists-high; Audience-average to high
3. Interest: Panelists-strong; Audience-average to strong
4. Identity: Panelists-relative experts; Audience-laymen to experts

Timing:

1. Preparation: Date of presentation
2. Presentation: Time allotted to panelists plus question period

Audio-Visual Aids:

1. Types: Still pictures x Charts x Models x Movies x Records x

5.14. Interview. Here is a situation you will find yourself in time and time again during your lifetime. We have said it is less formal certainly than addressing an audience. However, because of the lack of formality and because of the few guidelines of standard procedure, interviews present their own kinds of problems. One way to get some insight into the possible problems of interviews is to think about the purposes behind them and how they operate. Perhaps some of you have been interviewed for various reasons already.

As you discuss interviews, you may note how difficult it can be to state hard and fast rules for conducting yourself in an interview. However, you should be able to help yourselves in regard to the types of dress, usage, vocabulary, pronunciation, paralanguage and kinesics that are expected of interviewees.

Checklist: Interview

Language:
1. Dialect: Standard_x_ Local_x_ Social_x_
2. Usage: Formal____General_x_
3. Pronunciation: Standard for area_x_Nonstandard for area____
4. Vocabulary: Standard_x_ Local_x_ Social_x_
5. Sentence Structure: Standard_x_Local_x_ Social_x_

Paralinguistic Performance:
1. Pitch Range: Narrow____ Normal_x_ Wide____
2. Vocal Lip Control: Tense____Normal_x_Lax____
3. Glottal Control: Smooth_x_Not smooth____
4. Articulation Control: Careless____Normal_x_Precise____
   Over Precise____
5. Vocal characterizers: Cry____Laugh____Break____Whisper____
6. Vocal Qualifiers: Overloud____Oversoft____Medium_x_
   Overhigh____Overlow____Medium_x_
7. Vocal Segregates: Present_x_Not Present____
8. Resonance: Muffled____Nasal____Normal_x_Emphasized____
9. Rhythm and Tempo: Smooth_x_Slow____
   Medium_x_ Medium_x_
   Jerky____ Fast____

Subject Selection:
1. Purpose: Information and persuasion
2. Ability: Interviewee-average to high; Interviewer-high
3. Interest: Interviewee-strong; Interviewer-average to strong
4. Identity: Interviewee-informant; Interviewer-interrogator

Timing:
1. Preparation: Date of appointment
2. Presentation: Duration of interview

Audio-Visual Aids:*
Types: still pictures_x_Charts_x_Models_x_Movies____Records____

*Perhaps none, depending on the nature of the interview

5.15. Conversation. This is the least formal of these speaking situations, with the fewest guidelines. Here, as in the interview, the very lack of guidelines can present its own problems. Obviously, conversation is a broad term covering, in formality, more social situations than other terms we have considered. Your teacher may well not have the time to afford you the opportunity to use class time having conversations. Nonetheless, you will do well to take time on your own, if necessary, to compare notes with your classmates and other friends on the subject of the changing levels of formality of different conversations you have been involved in. To aid your thinking, turn back to the section on oral communication in which we listed the many different social situations you are likely to meet during the course of a week.

Checklist: Conversation

Language:

1. Dialect: Standard__x_Local_x__Social_x__
2. Usage: Formal____General__x__
3. Pronunciation: Standard for area_x__Nonstandard for area____
4. Vocabulary: Standard_x__Local__x_Social__x_
5. Structure: Standard_x__Local_x__Social_x__

Paralinguistic Performance

1. Pitch Range: Narrow____Normal_x__Wide____
2. Vocal Lip Control: Tense____Normal_x__Lax__x_
3. Glottal Control: Smooth__x_Not smooth____
4. Articulation Control: Careless____Normal__x_Precise____
   Over Precise____
5. Vocal Characterizers: Cry____Laugh____Break____Whisper_x__
6. Vocal Qualifiers: Overloud____Oversoft__x_Medium__x_
   Overhigh____Overlow____ Medium_x__
7. Vocal Segregates: Present__x_ Not present____
8. Resonance: Muffled____Nasal____Normal_x__Emphasized____
9. Rhythm and Tempo: Smooth__x_Slow_x__
   Medium_x__Medium_x__
   Jerky____ Fast_x__

Subject Selection:

1. Purpose: Socialization
2. Ability: Low to high
3. Interest: weak to strong
4. Identity: Member of a group

Timing:

1. Preparation: From present to date of gathering
2. Presentation: Duration of gathering

Audio-Visual Aids:

Types:Still pictures_x__Charts_x__Models_x__Movies____Records____

5.16. Speeches. Speeches fall into three categories -- informative, persuasive, and occasional -- because of the difference in the purposes for which they are presented. The names are accurate descriptions of these purposes. The informative speech is a factual presentation of knowledge the speaker wants to share with his audience. The persuasive speech could, and perhaps should, consist primarily of fact, but its purpose is to cause the audience to do what the speaker is asking it to do. The occasional speech is neither primarily informative nor persuasive, but rather serves the purpose of marking a special occasion for a group of people. The informative speech is the type you are most familiar with in the form of a classroom lecture. The persuasive speech is usually given either as a political talk or a commercial. The occasional speech is the type of talk given at a graduation or the presentation of an award.

Certain things are common to the preparation of all three types. First, you select your topic. In order to do so properly, you must know the following:

1. What is the purpose of the speech; is it to be informative persuasive, or occasional?
2. What will the audience be like in terms of:
   a) age group
   b) interests
   c) reasons for coming to hear you
   d) educational level(s)
3. How much time have you been allotted for your speech?
4. How long have you for the preparation of your speech?
5. What are your interests and abilities?
6. How easily can you get the information you will need for your chosen topic?

Once your topic is selected and narrowed, it should be outlined so that your research will be organized. When you do your research, whether you use the library or get your information directly from others, you should take notes on three by five cards, not on sheets of paper. The cards should be numbered after you have all your points organized, so that if they are dropped before or during the speech you will not be left with a hopeless mess. It is also much easier to hold your place on a small card than on a sheet of paper, Finally,cards are easier to hold in your hand when you do not have the use of a lecture stand.

As you prepare, time yourself constantly so that in your delivery of the speech you will just fill the time slot you have been allotted. Do not time yourself only in the early stages of your preparation because, as you get to know the speech better, you will deliver it faster.

Take time to make sure you are secure in the pronunciation of all the terms you will use in the speech. Sometimes, as you probably already know, the research on the topic will turn up unfamiliar words. This is fine; it helps broaden your understanding of your subject and increases your vocabulary. Just make sure that when you deliver the speech and use the new words you have mastered them.

A keynote to success in the presentation of any speech is--relax. The audience does not want you to bungle, especially in your class room; the students are all your friends, and if not, they know they will soon be in the same position, so any help they give you will be welcome in return. Nor does the teacher wish you to fail. No one is out to "get you". Once you realize this you can think about important things in presenting a speech. First, body set is important; a major part of this is posture. Obviously, relax does not mean slouch. Slouching shows your audience you are tired, sick or indifferent. You should stand at ease but erect, with your weight on the balls of your feet just in back of your toes. Your feet should be far enough apart so you have control of your balance and so you will not sway as you speak. Your hands should hang at your sides until you gesture with them. When you gesture, make sure the gesture fits the point. And make sure the audience can tell it is a gesture, not a twitch . Your teacher and fellow students will guide you, and the more speeches you give, the better you will be at gesturing. Movement of a limited nature is always permissible in delivering speeches. Of course, if a lectern of some sort is used, movement is very limited, but you can turn from one side of the audience to the other. One negative point -- do not lean on a lectern for support. If you do not use a lectern, your movement will be relatively free; avoid the extreme of pacing like a caged animal, and be sure the movement is related to the points you are making. There are some rules of thumb that will aid you in your movement. First, always face the audience. The listeners expect you to look at them all the time, and if you do, your chances of keeping their attention are greatly enhanced. If you move toward the audience slightly, they will assume you are emphasizing a point and/or appealing to them in some way. If you move away from them, they will feel you have finished a given point of your speech, Some practice before a mirror or in front of a friend will help you know how your movement looks. As to your facial expression, if you are sincere, your facial expression will take care of itself.

Checklist: Informative Speech-General

Language:

1. Dialect: Standard__x__Local__x__Social____
2. Usage: Formal____General__x__
3. Pronunciation: Standard for area__x__Not standard for area____
4. Vocabulary: Standard__x__Local__x__Social____
5. Sentence Structure: Standard__x__Local__x__Social____

Paralinguistic Performance:

1. Pitch Range: Narrow____ Normal____Wide__x__
2. Vocal Lip Control: Tense__x__Normal____Lax____
3. Glottal Control: Smooth__x__Not Smooth____
4. Articulation Control: Careless____Normal____Precise__x__
   Over precise__x__
5. Vocal Characterizers: Cry____ Laugh____Break____Whisper____
6. Vocal Qualifiers: Overloud__x__Oversoft____Medium__x__
   Overhigh____Overlow____Medium__x__
7. Vocal Segregates: Present__x__Not present____
8. Resonance: Muffled____Nasal____Normal__x__Emphasized__x__
9. Rhythm and Tempo: Smoothx____Slow__x__
   Medium__x__ Medium__x__
   Jerky____ Fast____

Subject Selection:

1. Purpose: To inform
2. Ability: Speaker-high; Audience-low to high
3. Interest: Speaker-strong; Audience-weak to strong
4. Identity: Speaker-relative expert; Audience-laymen

Timing:

1. Preparation: Date of appearance
2. Presentation: Time allotted to speaker

Audio-Visual Aids:

Types: Still pictures__x__Charts__x__Models__x__Movies__x__Records__x__

Checklist: Informative Speech
Specialized

Language:

1. Dialect: Standard x Local x Social x
2. Usage: Formal x General x
3. Pronunciation: Standard for area x Not standard for area ____
4. Vocabulary: Standard x Local x Social x
5. Sentence Structure: Standard x Local x Social x

Paralinguistic Performance:

1. Pitch Range: Narrow ____ Normal ____ Wide x
2. Vocal Lip Control: Tense x Normal ____ Lax ____
3. Glottal Control: Smooth x Not smooth ____
4. Articulation Control: Careless ____ Normal ____ Precise x
   Over precise x
5. Vocal Characterizers: Cry ____ Laugh ____ Break ____ Whisper ____
6. Vocal Qualifiers: Overloud x Oversoft ____ Medium x
   Overhigh ____ Overlow ____ Medium x
7. Vocal Segregates: Present x Not present ____
8. Resonance: Muffled ____ Nasal ____ Normal x Emphasized x
9. Rhythm and Tempo: Smooth x Slow x
   Medium x Medium x
   Jerky ____ Fast ____

Subject Selection:

1. Purpose: To inform
2. Ability: Speaker-high; Audience-high
3. Interest: Speaker-high; Audience-high
4. Identity: Speaker-relative expert; Audience-relative experts

Timing:

1. Preparation: Date of appearance
2. Presentation: Time allotted to speaker

Audio-Visual Aids:

Type: Still pictures x Charts x Models x Movies x Records x

Checklist: Persuasive Speech
Specialized

Language:

1. Dialect: Standard__x__Local__x__Social__x__
2. Usage: Formal__x__General__x__
3. Pronunciation: Standard for area__x__Not standard for area___
4. Vocabulary: Standard__x__Local__x__Social__x__
5. Sentence Structure: Standard__x__Local__x__Social__x__

Paralinguistic Performance:

1. Pitch Range: Narrow___ Normal___Wide__x__
2. Vocal Lip Control: Tense__x__Normal___Lax___
3. Glottal Control: Smooth__x__Not smooth___
4. Articulation Control: Careless___Normal___Precise__x__
   Over precise__x__
5. Vocal Characterizers: Cry__x__Laugh__x__Break__x__Whisper__x__
6. Vocal Qualifiers: Overloud__x__Oversoft__x__Medium__x__
   Overhigh__x__Overlow__x__Medium__x__
7. Vocal Segregates: Present__x__Not present___
8. Resonance: Muffled___Nasal___Normal__x__Emphasized__x__
9. Rhythm and Tempo: Smooth__x__ Slow__x__
   Medium__x__ Medium__x__
   Jerky___ Rapid___

Subject Selection:

1. Purpose: Persuasion
2. Ability: Speaker-high; Audience-high
3. Interest: Speaker-strong; Audience-strong
4. Identity: Speaker-authoritative outsider; Audience-members of well informed group

Timing:

1. Preparation: Date of Address
2. Presentation: Time allotted to speaker

Audio-Visual Aids:

Types: Still pictures__x__Charts__x__Models__x__Movies__x__Records__x__

Checklist: Occasional Speech

Language:

1. Dialect: Standard__x__Local__x__Social__x__
2. Usage: Formal__x__General__x__
3. Pronunciation: Standard for area__x__Not standard for area____
4. Vocabulary: Standard__x__Local__x__Social__x__
5. Sentence Structure: Standard__x__Local__x__Social__x__

Paralinguistic Performance:

1. Pitch Range: Narrow____Normal____Wide__x__
2. Vocal Lip Control: Tense__x__Normal____Lax____
3. Glottal Control: Smooth__x__Not smooth____
4. Articulation Control: Careless____Normal____Precise__x__
   Over precise__x__
5. Vocal characterizers: Cry__x__Laugh__x__Break__x__Whisper__x__
6. Vocal Qualifiers: Overloud__x__Oversoft__x__Medium__x__
   Overhigh__x__Overlow__x__Medium__x__
7. Vocal Segregates: Present__x__Not present____
8. Resonance: Muffled____Nasal____Normal__x__Emphasized__x__
9. Rhythm and Tempo: Smooth__x__Slow__x__
   Medium__x__Medium__x__
   Jerky____Fast____

Subject Selection:

1. Purpose: to mark a special event
2. Ability: Speaker-high; Audience-low to high
3. Interest: Speaker-strong; Audience- average to strong
4. Identity: Member of a group

Timing:

1. Preparation: Date of occasion
2. Presentation: Time allotted to speaker

Audio-Visual Aids:

Types: Still pictures____Charts____Models*____Movies____Records____

*Only in the case of an award - otherwise nothing

Conclusions

5.17. We have talked about dialect selection -- standard, local and social -- and levels of usage -- formal, general and unacceptable -- and we have shown the application of all these to various oral communication situations. We have also discussed several sample situations with their environments, structures, purposes and problems.

As you prepare, remember what image you wish to give the audience of yourself. It is this desired image that governs what you say and how you say it, this and how you dress and move before an audience. Here is an opportunity to learn how to be who you want to be by selecting what you feel are the best combinations for you. This selection begins with what you choose to talk about and the viewpoint you select toward the subject. It continues with your choice of expression of that viewpoint. The selection process includes matching your language, paralanguage and kinesics so they are mutually helpful. Even your manner of dress affects the total communication.

As we said in introducing the sample oral communication situations, your most important job is observation. You are to observe yourself and others, so that you are able to tell not only what you like and dislike, but why you like or dislike certain patterns of language, paralanguage and kinesics in specific oral communication situations. Then you will be able to select from among many possible patterns and use those you believe will aid you in being the person you wish to be for yourself and other people.

We cited several examples of possible misinterpretation of language and paralanguage. These may have seemed very simple to you. However, in two years we have seen two striking examples of complex involvement arising from seemingly simply misunderstandings. In the recent Panama incident, relations between the United States of America and Panama broke down ostensibly over two possible uses of the word negociar - "to discuss" or "to negotiate". During a U.N. session several years ago, Premier Krushchev banged his shoe on the table, causing quite a stir. To us this is very uncivil behavior, but to Russians, apparently, it just indicates forcefulness and/or enthusiasm. Look again at our earlier examples to see whether the situations and their possible outcomes are not more complex than they seem.

5.18. Suggested further readings.

Boleslavsky, Richard. Acting: The First Six Lessons. New York: Theatre Art Books, 1949
(This is an extremely valuable aid for learning the procedure of observation.)

Braden, Waldo. W., and Brandenburg, Earnest. Oral Decision-Making: Principles of Discussion and Debate. New York: Harper & Brothers, 1955.
(This book is a very thorough, detailed treatment of its title subject.)

Franklin, Miriam. Rehearsal. Englewood Cliffs, N.J.: Prentice-Hall Inc., 1950.
(This book consists primarily of a series of exercises in acting out scenes from dramatic literature.)

Lee, Charlotte I. Oral Interpretation. Boston:Houghton Mifflin Co., 1952.
(This book is a detailed description of the techniques and problems of oral interpretation. It also contains many exercises and suggestions for readings.)

PART III

THE SHAPES OF ENGLISH

UNIT SIX

MORPHOPHONICS: THE STRUCTURE POINTS OF ENGLISH WORDS

Introduction

6.1. More About Dialects. In Unit 3 you were introduced to the idea of the phoneme. You learned that a phoneme is a family of phonetically related sounds, called allophones. You also found that each phoneme of a language contrasts with all other phonemes of that language. Thus sip /síp/ becomes a completely different word if the initial /s/ is changed to /t/, as in tip /típ/, or if the final /p/ is changed to a /k/, as in sick /sík/.

In Unit I we pointed out that all dialects of a language have both many common characteristics and many which are not shared by other dialects. This is true not only of words and the way they are put together to form phrases, clauses, and sentences, but also of the phonemes which are used in words. For example, the word moon is pronounced /múwn/ in the Northeastern United States, but it is pronounced /mɨ́wn/ in some sections of the South. The phonemes /m/, /n/, and /´/ are common to both dialects in this word, but the vowel nucleus of the word is /uw/ in the Northeast and /ɨw/ in parts of the South. Regardless of this difference in the pronunciation of moon, speakers of both dialects will recognize both pronunciations as moon. The /uw/ and the /ɨw/ are in some way considered "equal", even though they are different phonemic nuclei.

In this example we are not saying that the Northeastern phonemic combination /uw/ is the same as the Southern /ɨw/. It isn't. They are still two separate phonemic vowel nuclei. All we are saying is that when a Northeasterner says /múwn/ the Southerner, who hears it correctly as /múwn/, will tell you that /múwn/ is the same thing as his /mɨ́wn/. By comparing the pronunciations of many words in both dialects we would see that there are many such "different but equivalent" pronunciations of both vowel and consonant phonemes. If we made such a comparison, we could set up a group of equivalents. We could do the same thing with all the dialects of English. This, in fact, will be the task of this unit. We will be concerned with setting up equivalences of both segmental and suprasegmental phonemes in all the dialects of English.

6.2. The Morphophone. The phonemic equations that we will arrive at through a comparison of the differences and common points of all English dialects -- such as Northeastern /uw/ = Southern /ɨw/ in the environment of nasals (/m/, /n/) -- will not represent phonemes nor allophones. They will represent an entirely different kind of language unit. If we wrote /múwn/ and /mɨ́wn/ as a single word representing both pronunciations, we might write mx́n, where the x stands for either the /uw/ or the /ɨw/. X itself would not be a phoneme. We call such units, representing phonemic equivalences between dialects, morphophones.

> A morphophone is a super-family
> of different but equivalent phonemes.

Morphophones are the smallest language units from which words and parts of words are made. Word parts, as you will see in the next unit, are called morphemes. Phone, as you already know, from phonology, allophone, and phoneme, refers to "sound". The name morphophone, therefore, indicates that these units are generalized sound families which are the building blocks of word parts. We can not say that word parts are actually forms from phonemes, since, as in /múwn/ and /mɨ́wn/, one or more phonemes may change from one dialect to another, while the meaning remains the same.

We could use any symbol we wished to indicate the various morphophone units of a language. We did so before when we arbitrarily used x to represent /uw/ and /ɨw/. In this book, however, we will use the letter or letter combination which represents the phoneme used in the greatest number of dialects. In this case, we will use uw. So that the symbol will not be mistaken for a phoneme, we will place a period after it. The words /múwn/ and /mɨ́wn/ would be written morphophonically as m.úw.n. In the case of a complex nucleus -- a vowel plus a semivowel which acts as a nuit -- we will place the period after the entire unit , as in m.úw.n., rather than after each member of the unit.

You may already have noticed a very interesting and important fact. Even though the Northeasternersays /múwn/ and the Southerner may say /mɨ́wn/, we spell the word in only one way, moon. We could show you many more examples. For instance, the man in Toronto says /héws/ or /h^{ə}ws/, the New Yorker says /háws/, and the man from North Carolina says /hǽws/. All of these variant phonemic nuclei -- /ew/, /^{ə}w/, /aw/, and /æw/ -- are symbolized in writing in one way -- ou. All four of the variant ways to pronounce the one word are symbolized by a single spelling, house. In other words, our spelling system tends to write in morphophones, not in phonemes or in allophones. Just think how confusing it would really be if we did as many specialists would like us to do -- "spell everything the way it sounds." The Northeasterner would spell moon as muwn, but the Southerner would spell it as mɨwn. The Canadian would spell house as hews or h^{ə}ws, but the New Yorker would spell it as haws. This wouldn't simplify our spelling system at all. It would mean that we would have as many different spelling systems as we do dialects, and that we would have to learn a new spelling system for every new dialect that we wished to be able to read. Instead, English has, of its own accord, as it were, created a simpler solution over centuries of trial and error. It has written in these phonemic equations, the morphophones, so that no matter how your dialect may pronounce a word compared to the ways it is pronounced in other dialects, all the varieties will be spelled the same. In this way a speaker of one dialect of English can easily read all other dialects. This principle -- that our spelling system is based on morphophones -- is very important. It will be discussed at much greater length in Unit 8, which is specifically concerned with spelling. For the moment it is enough to say that, if you understand the idea of the morphophone, you will find that the "irregularities" and "difficulties" of English spelling are not nearly so great as they are commonly thought to be.

English Morphophones

6.3. Procedures for Determining the Morphophones. In order to determine what the morphophones of English are we first examine the distribution of all the phonemes, segmental and suprasegmental, of a single dialect. It makes no difference which dialect we begin with. We examine the distributions of all the phonemes one by one with respect to each other in eleven basic environments (given below). The term environment simply means the specific phonemes that immediately precede and/or follow the phoneme under investigation.

1. /p/, /t/, /k/ (voiceless stops)
2. /f/, /θ/, /s/, /š/, /č/ (voiceless spirants and afficates)
3. /b/, /d/, /g/ (voiced stops)
4. /v/, /ð/, /z/, /ž/; /ǰ/ (voiced spirants and affricates)
5. /m/, /n/, /ŋ/ (nasals)
6. /l/ (lateral)
7. /r/ (special resonant)
8. 0 (that is, the phoneme is not preceded nor followed by any other phoneme)
9. Di-syllables (2-syllable phoneme combinations)
10. Consonant clusters such as /sk/, /st/, etc.
11. /V́rV̆/ (where V stands for any vowel, simple or complex)

If, by taking the same environment and varying only one phoneme, the meaning of the resulting form changes, then *the phonemes are in contrast.* For example, if we begin with environment number 1, voiceless stops, using /p/ and /t/ with a simple vowel nucleus between them, we would have, in the Northeastern United States dialect:

/pít/ *pit*	------------	/pút/ *put*
/pét/ *pet*	/pə́t/ *putt*	---------
/pǽt/ *pat*	/pát/ *pot*	---------

We have held the environment the same and simply changed the vowel nucleus. Each time the vowel phoneme is changed the meaning of the resulting word also changes. This indicates that /i/, /e/, /æ/ , /ə/, /a/, and /u/ contrast. Notice, however, that in this dialect we can not make a contrast in meaning between /pát/ and /pɔ́t/; both are heard as the word we spell *pot*. We can, however, make a contrast between /kát/ *cot* and /kɔ́t/ *caught* in the Northeastern dialect. Though we have not used the /p/-/t/ environment, we have used a voiceless stop environment, since /k/ is a voiceless stop just as /p/ and /t/ are. In this environment we do have a contrast in meaning between forms with /a/ and forms with /ɔ/; therefore, we must add /ɔ/ as a contrasting phoneme in this dialect.

There is no contrast in this dialect between /pót/ and /pɔ́t/ or between /kót/ and /kɔ́t/. The form /pót/ would be interpreted by the hearer as *pot* or *put*, while /kót/ would be interpreted as *caught*, *cot*, or *coat*. In neither case would it be easy to say for sure which of the pairs was intended by the speaker. Since no contrast is made between /o/ and /ɔ/, and since we have established that /ɔ/ does contrast with /a/, then /o/ is not a contrasting phoneme in this dialect.

The same type of situation that is found with /o/ and /ɔ/ is also found with the phoneme /ɨ/ in this dialect. What, for example, would you say the phonemic combinations /pɨ́t/ and /kɨ́t/ mean? /Pɨ́t/ could mean *pit* /pít/ to some people, or *put* /pút/ to others, or perhaps even *pet* /pét/ or *pot* /pát/ to some. /Kɨ́t/ could mean *kit* /kít/, *cut* /kə́t/, *cot* /kát/, or *caught* /kɔ́t/. There is, in other words, no contrast in meaning which depends solely on the use of the phoneme /ɨ/. In this dialect, then, all the simple vowel phonemes, *except* /o/ and /ɨ/, contrast with each other -- they create a change in the meaning of a word, if all other phonemes in it are held constant.

In our example above we have used only the first environment, voiceless stops, with simple vowel nuclei, in a single dialect. We must also examine the simple vowels in all the other ten environments listed above. We must, too, examine the environments of each of the complex vowel nuclei, of the consonants, the semi-vowels, and the suprasegmentals. Once this has been done we will have a list of the contrasting phonemes for that one dialect.

The next task is to do the same checking for all the dialects of English. Needless to say, this is a job for the linguistic specialist in English dialects, not the beginning student. It has, fortunately, been done using the type of phonological analysis that was presented to you in Unit 3.

Once the contrasting phonemes of all English dialects have been established by the procedures we have just discussed, one must equate the phonemic variants which do not effect a change in meaning from dialect to dialect, such as /háws/, /héws/, /hə́ws/, hǽws/ = house. Each group of phonemic equivalents represents one morphophone. So, in the example in the preceding sentence, we have four morphophones: h., aw., s., and ´. Remember that the symbols we assign to each group of phonemic equivalents are arbitrary. We usually take the phonemic symbol used in the greatest number of dialects, and we always distinguish this symbol from phonemic symbols by placing a period after it.

6.4. The Morphophone Inventory. The groups of phonemic dialect variants and their morphophone symbols are given below. The list of variants is as complete as our current knowledge can make it, though there may be others that we have not included because of incomplete knowledge of some English dialects. In this listing the = symbol means "is represented by" and the ≈ symbols means "varies with." Notice that a single phoneme or phoneme combination may represent more than one morphophone. The vowel and suprasegmental morphophones have many dialect variants, while the consonants have very few. Pitch morphophones have not been worked out yet.

1. i. = /i/ ≈ /ɨ/
2. e. = /e/ ≈ /ɨ/
3. æ. = /æ/ ≈ /æy/ ≈ /æh/ ≈ /eh/
4. u. = /u/ ≈ /ɨ/
5. ɔ. = /o/ ≈ /ɔ/ ≈ /oh/ ≈ /ɔh/ ≈ /aw/ ≈ /oy/ ≈ /ow/ ≈ /ɔw/
6. ə. = /ə/ ≈ /əh/ ≈ /əy/ ≈ /ɨ/
7. a. = /a/ ≈ /æ/ ≈ /ah/ ≈ /æh/
8. eh. = /eh/ ≈ /æh/ ≈ /ah/ ≈ /æy/
9. əh. = /əh/ ≈ /əy/ ≈ /ɨh/
10. ah. = /ah/ ≈ /æh/
11. iy. = /iy/ ≈ /ɨy/
12. ey. = /ey/ ≈ /eh/
13. ay. = /ay/ ≈ /əy/ ≈ /æy/
14. ow. = /ow/ ≈ /əw/ ≈ /ew/ ≈ /ɔw/
15. uw. = /uw/ ≈ /ɨw/
16. aw. = /aw/ ≈ /æw/ ≈ /əw/ ≈ /ew/
17. y.uw. = /yuw/
18. oy. = /oy/ ≈ /əy/
19. y. = /y/ ≈ /i/
20. w. = /w/

21. h. = /h/
22. p. = /p/
23. b. = /b/
24. t. = /t/ (t.y. = /č/)
25. d. = /d/ (d.y. = /ǰ/)
26. k. = /k/
27. g. = /g/
28. f. = /f/
29. v. = /v/
30. θ. = /θ/
31. ð = /ð/
32. s. = /s/ (s.y. = /š/)
33. z. = /z/ (z.y. = /ž/)
34. š. = /š/ also s.y. = /š/)
35. č. = /č/ also t.y. = /č/)
36. ǰ. = /ǰ/ ≈ /ž/ also z.y. = /ž/)
37. m. = /m/
38. n. = /n/
39. ŋ. = /ŋ/
40. l. = /l/
41. r. = /r/ ≈ /ə/
42. ´. = /´/ ≈ /^/ ≈ /`/
43. ˘. = /`/ ≈ /˘/
44. +. = /+/ ≈ /|/ ≈ /||/ ≈ /#/
45. ||. = /||/ ≈ /#/

As a single chart the morphophones may be listed as below. Morphophones inside the boxes are common to all dialects. Those outside the boxes are found in some but not all dialects. Dashes indicate phonemes which do not become separate morphophones.

Simple Vowels

i.	----	u.
e.	ə.	----
æ.	a.	ɔ

Complex Vowels

"H" Series			"Y" Series			"W" Series		
----	----	----	iy.	----	----	----	----	uw.,y.uw.
eh.	əh.	----	ey.	----	----	----	----	----
----	ah.	----	----	ay.	oy.	----	aw.	ow.

Consonants

p.			t.		k.
b.			d.		g.
	f.	θ.	s.	š.	
	v.	đ.	z.	----	
				č.	
				ǰ.	
m.			n.		ŋ.
			l.		r.

Semi-Vowels

y.	w.	h.

In the tables above, notice that no dialect of English uses either the phoneme /ɨ/ or the phoneme /o/ to make contrasts in meaning. These two sounds exist only as phonemes, not as morphophones. Notice, too, that most of the phonemic complex vowels do not exist as morphophones. They do not make any meaningful contrast in words. The only consonant phoneme that does not become a morphophone is the phoneme /ž/. As you will see later, this phoneme results from the combination of the morphophones z.y. and occurs only in words which were not originally in the native English vocabulary -- most of them come from Latin, French or the Slavic languages. Examples are:

vision /vížɨ̆n/ = v.í.z.y.ə̆.n. from Latin through French
Zhukov /žúwkɔ̀f/ = z.y.úw.k.ɔ̀.f. from Russian

EXERCISE ONE

Below is a list of words and their phonemic pronunciation in two English dialects. To the right of the list is a blank column. Write the proper morphophonic spellings for each word in the blank column. How did you determine the morphophones? Refer back to the charts and tables on the previous pages whenever necessary.

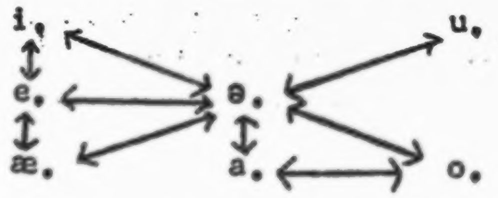
	SPELLING	DIALECT A	DIALECT B	MORPHOPHONIC SPELLING
1.	pit	/pít/	/pɨ́t/	
2.	cat	/kǽt/	/kéht/	
3.	cut	/kə́ht	/kə́t/	
4.	see	/sɨ́y/	/síy/	
5.	try	/tráy/	/trə́y/	

6.	flown	/flə́wn/	/flə́wn/
7.	grass	/grǽhs/	/gréhs/
8.	cute	/kyúwt/	/kyúwt/
9.	royal	/róyə̆l/	/rəyɨ̆l/
10.	cot	/kát/	/kɔ́t/

Morphophone Interchanges

6.5. After the groups of phonemic dialect variants have been listed and given single symbols as morphophones, we next look at the selections of morphophones that are made in different dialects, such as r.áw.t. versus r.úw.t. for the word we spell route. Notice that the two complex vowel nuclei here -- aw. versus uw. have already been established as morphophones by the procedures outlined in the earlier sections of this unit. We are dealing not with the use of one phoneme combination versus another, but with the actual use of one morphophone combination versus another. These differences in morphophone content between dialects, making no difference in meaning, are called morphophone interchanges. Unlike the phonemic variants given in the inventory in the preceding section, which are binding on all speakers of a particular dialect, morphophone interchanges are not binding. That is, a Canadian will always say /hə́ws/ if he comes from the Toronto area, never /háws/, but he may say either r.áw.t. or r.úw.t. for the word route. Interchanges will be symbolized by a double-pointed arrow ⟷ . The interchanges are:

A. Simple Vowel with Simple Vowel



uw. ⟷ ə.
uw. ⟷ u.
ow. ⟷ a.
ow. ⟷ o.

B. Complex and Simple Vowels

iy. ⟷ ə.
iy. ⟷ e.
iy. ⟷ i.
ey. ⟷ æ.
ey. ⟷ e.
ay. ⟷ a.
oy. ⟷ o.
oy. ⟷ ə.
eh. ⟷ æ.
əh. ⟷ ə

C. Complex Vowels with Complex Vowels

iy. ⟷ ay.
iy. ⟷ ey.
oy. ⟷ ay.
uw. ⟷ ow.
uw. ⟷ aw.

D. Consonant Interchanges

(1) Voiceless C. ⟷ Voiced C.
(2) ŋ. ⟷ n.
(3) r., l., y., w., h., all interchange with each other or with Ø
(4) f., θ., s., š. all interchange with Ø (zero)

EXERCISE TWO

Below is a list of 15 pairs of morphophonically written words. The two morphophonic spellings for each pair represent a single word, given in the first column. In column three, which has been left blank, write the formula for the morphophone interchange and indicate whether it is a simple-simple interchange, a complex-simple interchange, a complex-complex interchange, or a consonant interchange.

SPELLING	MORPHOPHONIC PAIRS	INTERCHANGE & INTERCHANGE TYPE
1. can	k.e.n. ⟷ k.æ.n.	
2. syrup	s.i.r.ə.p. ⟷ s.e.r.ə.p.	
3. fog	f.o.g. ⟷ f.a.g.	
4. year	y.iy.r. ⟷ y.ə.r.	
5. extremism	e.k.s.t.r.iy.m.i.s.m. ⟷ e.k.s.t.r.e.m.i.s.m.	
6. creek	k.r.iy.k. ⟷ k.r.i.k.	
7. data	d.ey.t.ə. ⟷ d.æ.t.ə.	
8. ate	ey.t. ⟷ e.t.	
9. sure	š.uw.r. ⟷ š.u.r.	
10. get	g.e.t. ⟷ g.i.t.	
11. neither	n.iy.đ.r. ⟷ n.ay.đ.r.	
12. route	r.uw.t. ⟷ r.aw.t.	
13. greasy	g.r.iy.s.iy. ⟷ g.r.iy.z.iy.	
14. singing	s.i.ŋ.i.ŋ. ⟷ s.i.ŋ.i.n.	
15. fifth	f.i.f.θ. ⟷ f.i.θ.	

EXERCISE THREE

Below is a list of ten word pairs written phonemically. There is a phonemic difference in one part of each pair. Decide whether this difference is a phonemic variant or a morphophonic interchange. In the third, blank column write the word pair morphophonically. In pairs in which the difference is just phonemic (which you can determine by looking at the phonemic variant tables on the previous pages) you will have a single morphophonic form. In pairs in which the difference is morphophonic (an interchange, that is) you will have two different morphophonic forms. Remember: to be a morphophonic interchange, the part of the word that changes from one dialect to another must have the status of a morphophone itself (consult the list of morphophones on the previous pages) and must change according to one of the patterns in the list of morphophone interchanges. An example of each type is:

1. milk /mélk/ /mílk/

This is an interchange, since both /e/ and /i/ have the status of separate morphophones, as can be seen from the table of morphophones in the section on the English morphophone inventory. Also e. ↔ i. is a regular interchange pattern listed under the interchange section. The morphophonic spelling of the two forms of the word would be:

m.é.l.k.⟷m.í.l.k.

2. mouse /máws/ /méws/

This would be an example of phonemic variants, since only /aw/ has the status of a separate morphophone; /ew/ does not have this status, as you can see by looking at the table of the "W" Series complex vowel morphophones on p. The word would be morphophonically written as

/máws/ ≈ /méws/ = m.áw.s.

SPELLING	PHONEMICALLY WRITTEN WORD PAIRS	INTERCHANGE OR VARIANTS?? and MORPHOPHONIC SPELLING(S)
1. join	/ǰóyn/ /ǰáyn/	
2. gums	/gúmz/ /gə́mz/	
3. dog	/dɔ́hg/ /dág/	
4. dog	/dɔ́hg/ /dɔ́g/	
5. man	/mǽn/ /mǽhn/	
6. frog	/frág/ /frɔ́hg/	
7. nice	/náys/ /nə́ys/	
8. swimming	/swímĭŋ/ /swímĭn/	
9. cow	/káw/ /kéw/	
10. which	/whíč/ /wíč/	

Morphophone Changes Within Single Dialects

6.6. Diaphonemic Variation. Once you have learned the patterns of phonemic dialect variants and the basic interchange formula, you have learned the most difficult features of sound change between dialects in English. Unfortunately, however, there are three further types of change that occur in individual dialects. Though these additional sound changes may seem to be the "straw that broke the camel's back", you will find that they are easier to learn and much more predictable in most instances than the variants and interchanges, which you simply have to learn by memory and by applying them to many examples.

The first type of sound variation within single dialects is called diaphonemic variation. It will be symbolized by ≋ . In diaphonemic variation an individual can, within his own dialect, use one phoneme or another freely. Such variations differ widely from dialect to dialect and cannot, consequently, be listed in full. Some examples, however, are given below.

Dialect A	just	/jə́st/ ≋ /jɨ́st/	-- This means that the speaker of dialect A may say either /jə́st/ or /jɨ́st/ on any occasion for the word just.
Dialect B	just	/jə́st/=/jɨ́st/ ≋/jíst/ gist	-- This means that the speaker of Dialect B will always say /jə́st/ for the word just, but that he may say either /jɨ́st/ or /jíst/ for the word gist. Unlike speaker A, whose /jɨ́st/ means just, speaker B's /jɨ́st/ will mean gist.

In these two examples we might say the following: in Dialect A the phoneme /ɨ/ is a diaphoneme of morphophone ə., while in Dialect B /ɨ/ is a diaphoneme of morphophone /i/. Remember, a speaker of Dialect A may always say /jə́st/ for just if he wishes, but he may freely use the form /jɨ́st/ if he wishes for the same word.

6.7. Alternates. The second type of morphophonic variation within dialects is called alternation. Alternation is binding on all speakers of the dialect. This simply means that all speakers of any given dialect will *always* use the alternations. Alternation is symbolized by ∼, and is the changing of one morphophone for another. It is unlike interchange in that this replacing of one morphophone by another takes place within a dialect, not from one dialect to another. Furthermore, alternation takes place *only* if the following part of the word contains the morphophone y. as a unit. There are only five vowel alternations. They are:

1. iy. ∼ e. *extreme* - *extremity*, e.k.s.t.r.íy.m. ∼ e.k.s.t.r.é.m.y.t.iy

2. ey. ∼ æ. *insane* - *insanity* , i.n.s.éy.n. ∼ i.n.s.ǽ. n.y.t.iy.

3. ay. ∼ i. *sublime* - *sublimity*, s.ə.b.l.áy.m. ∼ s.ə.b.l.i.m.y.t.iy.

4. ow. ∼ a. *verbose* - *verbosity*, v.e.r.b.ów.s. ∼ v.e.r.b.á.s.y.t.iy.

5. aw. ∼ ə. *profound* - *profundity*, p.r.ow.f.áw.n.d. ∼ p.r.ow.f.ú.n.d.y.t.iy.

Notice that all the changes in the above examples occur only in the environment of an immediately following morphophone y. In these examples we have used, for uniformity's sake the word segment is spelled *-ity* (morphophonically -y.t.iy.), but the same changes would occur with any other following word segment containing morphophone y., such as *pronounce* , *pronunciation*, which have the morphophonic forms p.r.ow.n.áw.n.s. p.r.ow.n.ú.n.s.y.ey.t.y.ə.n.

Consonant alternations are many. They, too, are binding on all speakers and they, too, take place only in the environment of a following morphophone y. An example would be the words *historic*,*historicity*, h.i.s.t.ó.r.y.k. h.i.s.t.o.r.y.s.ý.t.iy. In this example the word segment spelled *-ic* and pronounced /-ik/ changes to /-is/ when the y-containing word segment *-ity* is added. Morphophonically this is an alternation of k. with s. in the presence of y.

EXERCISE FOUR

Below is a list of ten related word pairs. Each one illustrates a particular vowel or consonant alternation within a single dialect. Indicate in column three the proper formula for this alternation. A few examples contain two alternations; Watch for these.

SPELLINGS	MORPHOPHONIC SPELLINGS	ALTERNATE FORMULA
1. specific - specificity	s.p.e.s.y.f.y.k. ∼ s.p.e.s.y.f.y.s.y.t.iy.	

2. prose - prosody p.r.ow.z. ~ p.r.a.s.y.d.iy.
3. species - specific s.p.iy.s.iy.z. ~ s.p.e.s.y.f.i.k.
4. profane - profanity p.r.ow.f.ey.n. ~ p.r.ow.f.æ.n.y.t.iy.
5. divine - divinity d.i.v.ay.n. ~ d.i.v.i.n.y.t.iy.
6. denounce - denunciation d.iy.n.aw.n.s. ~ d.iy.n.u.n.s.y.ey.t.y.ə.n.
7. vain - vanity v.ey.n. ~ v.æ.n.y.t.iy.
8. serene - serenity s.ər.iy.n. ~ s.ər.e.n.y.t.iy.
9. discreet,- discretion d.i.s.k.r.iy.t. ~ d.i.s.k.r.e.t.y.ə.n.
10. define - definition d.i.f.ai.n. ~ d.e.f.ə.n.i.t.y.ə.n

6.8. Replacements. The final type of morphophonic change within dialects is called replacement. Replacements are binding on all speakers of a dialect. They represent the change of one morphophone for another and will be shown by →. They differ from alternates (which occur only in the environment of morphophone y.) and from diaphonemic variations (which occur only in phonemic environments) in that they occur only in the environment of what we will later call morphemes. Morphemes may, for the moment, be defined as word parts. When a word has an additional word part added to it, there may be a morphophonic replacement. Although there are a good many replacements in English, they are used very frequently and are therefore not difficult for the native speaker to learn. Some examples are:

keep - kept, k.iy.p. → k.e.p.t. We have added the past-tense indicating -t word part, therefore the iy. → e.

foot - feet, f.u.t. → f.iy.t. We have added a plural idea, and, even though it has no form in this word, we will consider it a Ø (zero) form of the plural-indicating -s word part, therefore u. → iy.

EXERCISE FIVE

Below is a list of ten related word pairs. The second word in each group has been formed from the first one by the addition of a word part. Indicate the added word part (being careful to look for Ø word parts) and write the replacement formula in the third, blank column.

SPELLINGS	MORPHOPHONIC SPELLINGS	ADDED WORD PART AND REPLACEMENT FORMULA
1. mouse - mice	m.áw.s. → m.áy.s.	
2. come - came	k.ə́.m. → k.ey.m.	
3. sing - sang	s.í.ŋ. → s.ǽ.ŋ.	
4. eat - ate	íy.t. → éy.t.	
5. write - wrote	r.áy.t. → r.ów.t.	
6. goose - geese	g.úw.s. → g.íy.s.	
7. dream - dreamt	d.r.íy.m. → d.r.é.m.t.	
8. three - thrice	θ.r.íy. → θ.r.áy.s.	
9. grease - greasy	(pronounce these as /gríys/ and /gríyzìy/ in this example, even if you are used to saying /gríys/ and /gríysìy/. The morphophonic spellings are: g.r.íy.s. → g.r.íy.z.ìy.	
10. breath(noun) - breathe (verb)	b.r.é.θ. → b.r.íy.ð.	

Notice that all the examples above are what might be called unproductive types of forms in that we do not normally in Modern English form plurals by changing the vowel nucleus -- instead we add -s. In the same way we do not normally form the past tense of verbs by a vowel change -- instead we add -t or -ed. These unproductive patterns, however, are relics of an earlier stage of English when they were used quite widely as one of several normal ways to form one word from another. Notice, too, that the bulk of morphophone replacements are vowel-replacing-vowel, though there are a few of consonant-replacing-consonant.

Conclusions

6.9. You have studied five varieties of sound change in this unit. Two of them, phonemic variants and interchanges, take place between dialects. The other three, diaphonemic variants, alternations, and replacements, take place only within single dialects. These last three are found in almost all English dialects. This unit will undoubtedly be the most complex in the entire course, and you may feel tempted to neglect it. A great proportion of what we will have to say in the remaining units, however, will hinge on a rather thorough understanding of the principles of morphophonics, and it is therefore necessary that you understand at least the basic ideas of each of the five types of dialect sound change. You may not find it possible to memorize all the lists of changes. This is perfectly all right -- they are here for you to refer to at any time. If, however, you understand the workings of morphophonics, you will find that you will soon learn to recognize each type of change when you run across an example of it.

Below you will find a general exercise on morphophonics. Examples of all five types of change have been mixed together in a single list. In the third column indicate the types of change, the formula to indicate it, and write the words morphophonically. This exercise is to be completed as class home work. Take as much time as you wish on it. Return it to your teacher the day after it has been assigned.

NAME ______________________________

SCHOOL ________________ GRADE ______

TEACHER ______________________________

MORPHOPHONICS QUIZ

SPELLING	PHONEMIC SPELLING		TYPE OF CHANGE, FORMULA, AND MORPHOPHONIC SPELLING(S)
1. twelfth	/twélθ/	/twélfθ/	
2. room	/rúwm/	/rúm/	
3. log	/lɔ́hg/	/lág/	
4. belief - believe	/bɨ̆líyf/	/bɨ̆líyv/	
5. put	/pút/	/pɨ́t/ (within the same dialect)	
6. due	/dúw/	/dyúw/	
7. sew	/sów/	/séw/	
8. bird	/bɨ́rd/	/bóyd/	
9. urbane - urbanity	/ɨ̀rbéyn/	/ɨ̀rbǽnɨ̆tìy/	
10. sleep - slept	/slíyp/	/slépt/	
11. merry	/mérìy/	/mə́rìy/	
12. either	/íyðɨ̆r/	/áyðɨ̆r/	
13. man - men	/mǽn/	/mén/	
14. gate	/géyt/	/gêht/	
15. fright	/fráyt/	/frə́yt/	

NOTE

UNIT SEVEN

MORPHEMICS: THE STRUCTURE OF ENGLISH WORDS

With the exception of exercises of Before-position morpheme types, all exercises for this unit have been placed at the end of the unit itself. These may be used either at the end of each section with which they deal, or, if you wish to speed up presentation and then use the exercise material, they may be held until the entire unit has been gone over in class. In this way it is hoped that the considerable body of new data to be learned may be dealt with in whatever manner seems most rewarding for each individual class.

UNIT SEVEN

MORPHEMICS: THE STRUCTURE OF ENGLISH WORDS

Introduction

7.1. Morph and Morpheme. As a language has sounds -- the phones which bundle in a patterned fashion to make phonemes -- so does it have forms or shapes -- its words and word parts. The analysis and study of these form units is the province of the second major level of linguistic analysis, morphology. If you will refer back to Unit One, you will see that morphology is divided into three sub-areas in the same way that phonology, the study of sounds, was divided into a study of: (1) features, (2) phones, and (3) phonemes. The three sub-areas of morphology are: (1) morphophonics, (2) morphemics, and (3) syntax. You have already completed the bulk of your study of English morphophonics in Unit Six. In this unit you will continue your study of morphology with a thorough consideration of English morphemics. Syntax, the study of the arrangements of words to form phrases, clauses, and sentences, will be considered in Unit Nine.

Since we will be concerned with morphemics in this unit, let us begin by defining the basic unit of that field of study. It is called the morpheme. A morpheme has been defined as the smallest unit in language that can carry meaning. More technically, however, we should say that

A MORPHEME IS THE SMALLEST UNIT OF LANGUAGE THAT ACTS AS A STRUCTURAL SIGNAL.

A comparison with the procedures we used in phonemics may make this definition clearer. In arriving at the definition of a phoneme, you will remember, we talked about a phoneme as the smallest unit of sound that formed a contrast between two utterances. As an example let us look at the phoneme /s/. This phoneme is found in many words in English. We find a contrast between /s/ and its voiced counterpart /z/ in the words sip (/síp/) and zip (/zíp/). We find it contrasts, too, with /θ/ if we look at sing (/síŋ/) and thing (/θíŋ/). The change from /s/ to /z/ or /θ/ creates a contrast in meaning of the resulting forms. Therefore, we established /s/, /z/, and /θ/ as separate phonemes in English.

When /s/ is talked about as a part of a word, however, we are considering a new area of analysis. We can talk about /s/ as a word-part which has structural significance -- it can change a noun from a singular to a plural, as in hat (/hæt/) and its plural hats (/hæts/). When we look at /s/ as a form having the power, as it were, to make a plural from a singular, we are looking at it as a morpheme -- a minimum unit of form which acts as a structural signal. Notice that it, too, like a phoneme, makes a contrast in meaning. Without the /s/ the word hat refers to one thing, but with the /s/ the word hat-plus-/s/ refers to more than one thing. Consequently, just as different sounds in English make contrasts between two utterances (sip and zip), so do different forms make contrasts between two utterances (hat and hats). Morphemes, like phonemes, contrast.

In defining the phonemes of English we noticed another important point -- all the different sounds in English do not constitute separate phonemes. Some are grouped together into one phoneme. This is also true of the forms of English. All forms in English do not constitute separate morphemes.

An example from phonemics should again clarify this statement. The aspirated [p'] as in the word we phonetically write as [p'ɪt] (pit), the unaspirated [p] as in the word [k'ápɨr] (copper), and the unreleased phone [p˥] as in the word [st'áp˥] (stop), were not separate phonemes. Together they were simply parts or allophones of the phoneme /p/. We know that the allophone [p'] will be predictably found at the beginning of words in English, while the allophone [p˥] will be predictably found at the end of words in English. In medial positions [p] is used. There is no contrast, that is, between the three phones. This is why we wrote them all phonemically as /p/ -- /pít/, /stáp/, and /kápɨr/.

In the same manner, we find that there is no contrast between the two phonemes /s/ and /z/ when we consider them as language forms with structural significance, rather than as phonemes. We know that we always use the form /s/ to indicate plural after words which end in voiceless sounds except the voiceless grooved spirants and affricates (/s/, /š/, /č/), as in hats (/hæts/), but that we use the form /z/ to indicate the same thing, plural, after words ending in voiced sounds, again except voiced grooved spirants and affricates (/z/, /ž/, /ǰ/), as in dogs (/dᵓgz/). Finally, after voiceless and voiced grooved spirants and affricates (/s/, /z/, /š/, /ž/, /č/, /ǰ/), we use the form /ɨz/ to indicate plural as in fishes (/físɨz/) or noses (/nówzɨz/). These three forms, /s/, /z/, and /ɨz/, then, are simply varieties of a single language form which indicates plural number. They do not contrast with one another.

So far we have been writing the varieties of morphemes in a phonemic notation -- /s/, /z/, and /ɨz/, for example. The basic building blocks of words and word-parts or morphemes, however, are not phonemes, as we saw in Unit Six. We cannot say, for instance, that the basic building blocks of the word house are /h/ plus /aw/ plus /s/ plus some variety of phonemic stress. We cannot say this, since some people do not pronounce the vowel nucleus as /aw/ but, rather, as /æw/, /ew/ or /ᵊw/. Instead we must say that the building blocks involved are equations of different but meaningfully equivalent phonemes or phoneme clusters -- that is, morphophones.

IF MORPHEMES CONSIST OF COMBINATIONS OF MORPHOPHONES, WE MUST WRITE ALL MORPHEMES IN A MORPHOPHONIC NOTATION

If we do this for the phonemic varieties of the regular English plural morpheme, we will write either s. or z. We cannot, remember, write ɨ.z., since the phoneme /ɨ/ does not by itself form a separate morphophone in English. It occurs only as a phonemic variety of the morphophones i., e., ə., u., y., or Ø. -- in this case the latter, for the /ɨ/ of /ɨz/ is an automatic phonemic actualization of s. or z. after a grooved spirant or an affricate (/s/, /z/, /š/, /ž/, /č/, /ǰ/). Whether we use z. or s. is determined by the final morphophone of the word it is added to. Morphophone z. and morphophone s., in other words, form a replacement formula, z. → s., (see Unit Six). Morphophone z. is used after words that end in a voiced morphophone or the grooved spirant and affricate morphophones s., š., ž., č., and ǰ. Morphophone s. is used to indicate the plural in all other environments.

Just as we used one symbol to indicate the phonetic varieties [pʻ], [p], and [p˺] of the phoneme "p", namely the symbol /p/, so we will use a single symbol to indicate the morphophonic varieties of the morpheme which indicates the regular English plural. We will arbitrarily pick the morphophone z., since this occurs more frequently than s. We might, however, write the full replacement formula (z. → s.) if we wished.

To further indicate that we are not justtalking about the morphophone z. in a replacement formula with morphophone s., but, rather, as a language form which acts as a unit, we put the morpheme sign (√) in front of it -- √ z. This notation says that we are talking about the morpheme z., not just a morphophone and not just a phoneme. That one simple formula says: "we mean the phonemic combinations /s/, /z/, and /ɨz/ operating as a single meaningful unit, represented morphophonically by z. and s. in a replacement formula, z. → s., and symbolized by its major member, z."

With this information, we can add to our definition of the morpheme. We can now say that:

MORPHEMES ARE THE SMALLEST UNITS OF LANGUAGE THAT ACT AS STRUCTURAL SIGNALS. THEY CONSIST OF SINGLE MORPHOPHONES OR SEQUENCES OF MORPHOPHONES. THESE SEQUENCES RECUR IN A PATTERNED MANNER -- THAT IS WE FIND THEM OVER AND OVER AGAIN IN A LANGUAGE.

Not all recurrent sequences of morphophones are morphemes, however. For instance, in analyzing any paragraph, almost at random, we would find the phonemic combination /əv/ recurring very frequently. Phonemic /əv/, which may be symbolized morphophonically as ə.v. when under primary stress, is a morpheme, since it can be seen to have a structural significance by itself. θ.v. also patterns with other units, but it does not become part of some other basic unit. We can study the relationship of θ.v. in such phrases as "the study of language." In the word love (/lə́v/, l.ə́.v.), however, the ə.v. is simply a fragment, not a morpheme in itself, since in this case it carries no structural significance by itself. It is, to sum up, important to remember that a sequence of morphophones must carry some structural significance that can be defined in order to be called a morpheme. In the same way the morphophone s. in the word say (/séy/, s.éy.)is not the plural morpheme √z. Why? Because it does not carry the pluralizing idea -- it has no structural significance in this particular word. It is simply part of the morpheme √s.éy.

We must also add that some sequences of morphophones carry more than one structural significance. In such cases we are dealing with two separate morphemes which simply happen to have the same morphophonic shape. An example would be the morphophonic sequence áw.r., phonemically /áwr/, which may mean either hour or our. We might say, then, that we are dealing with two homophonous (sound-alike) morphemes which we would symbolize as √áw.r.^{1} and √áw.r.^{2}. √áw.r.^{1} refers to a unit of time; √áw.r.^{2} is a pronoun. There are many such homophonous morphemes in English.

Another way to explain the above situation is to say that a morpheme may have one and only one structural significance. We know, for example, that the √z. plural is the same in morphophonic shape and phonemic shape as the morpheme that indicates the possessive of nouns, and these are both the same in morphophonic and phonemic shape as the morpheme that indicates the third person singular present tense of verbs -- boys (/bóyz/, b.óy.z.), boy's (/bóyz/, b.óy.z.), he goes (/gówz/, g.ów.z.). Even though the phonemic and morphophonic shapes of these three forms are identical they are said to be three separate morphemes, symbolized as √z.^{1} (plural), √z.^{2} (possessive), and √z.^{3} (3rd sg. pres. tense), since three different structural significances are involved.

The reverse of this situation, however, is not true. That is, it is not true that for every given structural significance there is only one morpheme. For example, the regular English plural morpheme is √z.^{1}. There are, though, other plural morphemes in English; for instance, the morpheme√n., which is used to indicate the plural with the word ox (/áks/). Its plural is oxen (/áksɨn/, á.k.s.n.). √n. is a separate morpheme by itself, even though its structural significance is the same as the √z.^{1} morpheme.

We have so far been talking about morphemes. We have said that they consist of sequences of one or more morphophones and that they must have a structural significance. They are symbolized by using a morphophonic notation in connection with the morpheme sign (√). We pointed out that many morphemes had several slightly different phonemic shapes.

THESE INDIVIDUAL PHONEMIC SHAPES ARE CALLED MORPHS, IN MUCH THE SAME WAY THAT THE INDIVIDUAL VARIETIES OF A PHONEME ARE CALLED PHONES. TOO, JUST AS WE SAID THAT A PHONEME CONSISTS OF ONE OR MORE ALLOPHONES, SO WE MAY ALSO SAY THAT THE MORPHS THAT MAKE UP A SINGLE MORPHEME ARE ALLOMORPHS.

The morphs /z/, /s/, and /ɨz/, for example, are allomorphs of the plural morphemes √z.^{1} and of the possessive morpheme √z.^{2} and of the 3rd sg. present morpheme √z.^{3}. When we are writing allomorphs, we use a phonemic notation, since we are talking about actual language occurrences, and we place them inside the root sign with a small a above it or write them between phonemic slant lines. We may talk about the allomorph ^{a}√s or /s/ of the morpheme √z.^{1}, for example.

In describing the allomorphs of a morpheme , remember that they must all be phonemically and morphophonically similar. We can not, that is, say that the phonemic shapes /n/ and /ɨn/ are allomorphs of the plural morpheme √z.^{1}. They are, instead, allomorphs of the plural morpheme √n.

As you have undoubtedly already gathered from the discussion in the past few pages, the term morpheme is not the same as word. Some words, such as boy (/bóy/, b.óy.), consist of a single morpheme, but other words, such as boys (/bóyz/, b.óy.z.), consist of two or more morphemes. In the word /bóy/ the single morpheme is √b.óy. . In the word /bóyz/, the two morphemes are √b.óy. and √z.^{1}. The actual allomorph of √z.^{1} that we have used is ^{a}√z (or we might also describe it simply as /z/). This is the allomorph that is found after voiced phonemes with the exception of voiced grooved spirants and voiced affricates.

IT SHOULD BE ADDED ONE FINAL TIME THAT WHEN WE ARE WRITING MORPHEMES, WE WRITE IN A MORPHOPHONIC NOTATION; IF, HOWEVER, WE ARE WRITING ALLOMORPHS (THE ACTUAL OCCURRENCES OF MORPHEMES), WE WRITE IN A PHONEMIC NOTATION.

7.2. The Concept of the Syllable. The term syllable is generally defined as any part of a word that contains a vowel plus one or more consonants. While such a definition is essentially the one that we will use here, it is not precise enough for our purposes, and it will therefore be given certain extensions.

We may begin by saying that well over 90% of all English morphemes contain (1) a single vowel nucleus, consisting of a simple vowel morphophone or of a complex vowel morphophone (vowel plus h., w., or y.), and (2) one or more consonant morphophones before, after, or both before and after the vowel nucleus. Examples would be the morphemes boy (√b.óy.), post- (√p.òw.s.t.), and pre- (√p.r.íy.).

Very few English morphemes contain any more or any less than these two elements, but exceptions do occur. The plural morpheme √z.[1], for instance, lacks a vowel nucleus, and the morpheme √éy. as in the word atheist lacks any consonantal elements. There are also exceptions which contain more than the two elements above. The "more" in such instances will always be a second vowel nucleus, either simple or complex; for example, the morpheme inter- (√í.n.t.ə̆.r.) with two simple vowel nuclei, the morpheme mono- (√m.áh.n.ow.) with two complex vowel nuclei, or the morpheme contra- (√k.áh.n.t.r.ə̆.) with one simple and one complex vowel nucleus. These exceptions are very few, however, and it remains basically true that all types of English morphemes contain a single vowel nucleus, simple or complex, plus one or more consonants.

From this examination of the morphophonic make-up of English morphemes and the traditional definition of syllable given above, it should be obvious that the definitions of morpheme and syllable are, in English, almost identical, and we will indeed say that the two terms are the same except in the unusual cases given in the last paragraph where a morpheme has more than one vocalic nucleus.

If we say, then, that most English morphemes are monosyllabic, the problem of deciding to which syllable the various consonant morphophones of a word belong vanishes, for once the word has been segmented into its morphemic parts it has also been divided into its proper syllables. Knowing that each syllable has a vowel nucleus plus one or more consonants will help you identify morphemes, too, since if, after segmenting a word, you are left with any segment with more than one vowel nucleus, you should suspect that such a segment will actually be more than a single morpheme.

It is still possible, of course, that, after segmenting a word into its morphemic parts, you may be left with a morpheme which actually does have two vowel nuclei -- one of the exceptions mentioned above. You may usually determine this by resorting to a dictionary. If you find that you are dealing with a true two-nucleus morpheme, the problem remains -- does it have one or two syllables? In this case, we would say it has two syllables, each one having a vowel nucleus. How, then, do you decide to which of the two syllables the consonants of the morpheme belong? The following rules may be used to define the syllable borders:

1) A single consonant will be placed with the second vowel nucleus. For example, the morpheme mono- (√m.áh.n.òw.) would be syllabified as mo-no-(√m.ah. - n.ow.).

2) In a two-consonant cluster, the first consonant will go with the preceding vowel nucleus, and the other consonant will go with the following nucleus. For example, the morpheme *inter-* (√í.n.t.ə̆.r.) should be syllabified as *in-ter-* (√í.n. - t.ə̆.r.).

3) If three consonants come together in a single morpheme -- this is extremely unusual in two-syllable native English morphemes -- one member will usually be the morphophone r. In dividing such a cluster, the r. goes with the immediately preceding consonant morphophone, no matter what it may be, and then rule (2) above is applied, as though you were dealing with only two consonants. For example, the morpheme *contra-* (√k.áh.n.t.r.ə̆.) is syllabified as *con-tra-* (√k.áh.n. - t.r.ə.).

Rules of syllabification may therefore be stated as follows:

1) Separate the word into its morphemic segments. Since most morphemes are monosyllabic (have one vowel nucleus), each of these morphemes will be a syllable, and the consonantal boundaries of each syllable will coincide with the boundaries of the morphemes.

2) If any segment has more than one vowel nucleus, suspect: (a) that it is actually more than one morpheme, or (b) that it is a polysyllabic morpheme. Try to discover which is true by reference to the dictionary when possible.

3) If you find polysyllabic segments, each vowel nucleus will, with its surrounding consonants, form a separate syllable. Assign the consonants to the proper syllable by the rules given in the paragraphs above.

These principles might be called principles of *linguistic-syllabification*, for they are not the ones always used in spelling and printing. Instead of the principles that have been outlined here, most dictionaries follow arbitrary printer's conventions in deciding how a word should be separated into parts. These conventions differ from one dictionary to another, and it is solely by accident that they will on occasion happen to agree with the principles that have been discussed here. The entire problem of dictionary syllabification will be discussed at much greater length, however, in Unit Twelve, *Meaning and Composition.*

7.3. *Morphemic Positions and Classes.* Later in this unit we will discuss the various types of words in English. Now, however, we may point out that the ordinary English word may contain as many as thirteen morphemes or as few as one. We might also say, in the light of our discussion of the term *syllable*, that the maximum number of syllables a normal English word may have is thirteen and the minimum is one. Examples are *boy* and decompartmentalizationalistically. The last variety is, fortunately, of very infrequent occurrence.

If we take a word which consists of more than one morpheme, we will see that it contains only one basic morpheme. This is the morpheme which is the essential structural unit of the word. This morpheme will occupy the central-position in the word -- it may be preceded by other morphemes and followed by other morphemes, though neither, of course, is necessarily the case. In the word depart, part is the basic part of the word; de- is a morpheme which occupies a before-position with respect to the basic morpheme. In department we have added another morpheme, -ment, which occupies an after-position **with** respect to the basic morpheme part. Aside from these three morpheme positions in an English word, there is one other slot which must be filled. This is the above-position. In the word éxpòrt, with primary stress on the ex- (a before-position morpheme), the above-position is occupied by a morpheme consisting of primary and tertirary stress √ ´+`. The total word is a noun. By changing the morpheme in the above-position to √ `+´ -- putting the primary stress on the central-position morpheme -- we have changed the meaning of the word to èxpórt, a verb. Morphemes in English may consist, then, of either segmental or suprasegmental morphophones, and they will occupy one of these basic positions when they combine to form words.

MORPHEMES OCCUPY ONE OF FOUR POSITIONS IN ENGLISH WORDS: CENTRAL-POSITION, BEFORE-POSITION, AFTER-POSITION, OR ABOVE-POSITION. IF THEY OCCUPY ONE OF THE FIRST THREE POSITIONS, THEY WILL CONSIST OF SEGMENTAL MORPHOPHONES. IF THEY OCCUPY THE ABOVE-POSITION, THEY WILL CONSIST OF SUPRASEGMENTAL MORPHOPHONES.

We may also add that the morphemes which occupy the central-position may not occupy the before- or after-positions; before-position morphemes occupy only that position; and after-position morphemes occupy only that position. Above-position morphemes -- always consisting of suprasegmentals -- will, of necessity, only occupy that position. Furthermore, if we list all the morphemes which fall in each position and analyze them according to their morphophonic content, we will find that morphemes of each position are morphophonically different.

MORPHEMES OF EACH POSITION HAVE THEIR OWN UNIQUE MORPHOPHONIC CHARACTERISTICS.

According to their morphophonic content, there are nineteen different classes or types of morphemes in English. Each of these will be discussed in detail as we progress through this unit. For the moment, however, we will simply list them and indicate which position they fill. In the before-position there are four types of morphemes: prèbases, prewords, prephrases, and prefixes. In the central-position there are three types of morphemes: free primary bases, bound primary bases, and kernel vocalics. In the after-position there are ten types of morphemes: postbases, designative affixes, postwords, postphrases, afterbases, non-derivational affixes, derivational subbases, designative subbases, postfixes, and suffixes. In the above-position there are two types of morphemes: superfixes and suprafixes, which consist, respectively, of morphophones of stress and pitch.

Central Position Morphemes

7.4. Free Primary Bases. Free primary bases always contain one or more morphophonic vowel nucleus. They may bear any degree of phonemic stress, including primary /ʹ/. They may occur in free forms as whole words, such as boy (√b.óy.)or as parts of words, such as boyish (√b.óy. plus √-i.š.). In addition, the **free** primary base will be **the essential structural unit of the word.** In the word compartment (√k.a.m. - plus √p.a.r.t. plus √-m.e.n.t.), the morpheme √p.a.r.t. **is the basic structural unit** the word. The before-position and after-position morphemes aid in refining the **significance of the word.** We will devote an entire unit to the topic of meaning, so, for our purposes here, we will limit our statement on the function of the free primary base to what we have already said.

7.5. Bound Primary Bases. Some English morphemes which may be called primary bases because they contain the **basic significance of**the word, have one or more morphophonic vowel nuclei, and fall under any degree of phonemic stress, are, nevertheless, not free forms. They occur only in combination with before- or after-position morphemes. For example, the morpheme √s.t.r.u.k.t.- in the words structure,construct, destruction, instruct certainly contains the**basic significance** those words. It also has the morphophonic concent necessary for a free primary base. It lacks, however, the ability to occur alone; √s.t.r.u.k.t.- nevers occurs as a free word in English. Such a morpheme is called a bound primary base.

7.6. Kernel Vocalics. In pronouns and several other word types that will be discussed later in this unit, we will find still another type of central-position morpheme. These morphemes, too, occupy only the central-position; they, too, contain a vowel nucleus which may bear any degree of phonemic stress including /ʹ/; they, too, **are the basic structural units** of the words in which they are found. Unlike free or bound primary bases, however, this morpheme class, the kernel vocalic, consists solely of a vowel nucleus. Free and bound primary bases may also contain consonant morphophones, as in the examples given above, but kernel vocalics never contain consonants. The morpheme√(iy. → i.)of the pronouns he, she, *him*, *it*, *his* is an example. This morpheme indicates third person singular in a pronoun. The √h.- of *he* and the √š.- of *she* are other morphemes (in the before-position) indicating gender, while the √-m. of *him*, the √-t. of *it*, and the √-z. of *his* are morphemes in the after-position indicating grammatical "case." This unusual type of central-position morpheme does not occur frequently in English. With the exception of the kernel vocalic √(ay. → iy.) of *I*, *my*, *mine*, and *me*, kernel vocalics are all bound forms.

Before-Position Morphemes

Before discussing the varieties of before- and after-position morphemes, two points should be made:

(1) Unlike primary bases, which may be divided into free and bound varieties, all before- and after-position morphemes are *always* bound forms. They do *not* occur by themselves as free forms.

> BEFORE- AND AFTER-POSITION MORPHEMES, BECAUSE OF THEIR BOUND NATURE, ARE REFERRED TO COLLECTIVELY AS *AFFIXES*.

(2) As you will remember from our discussion of primary bases, these forms may occur under primary stress. There are also some kinds of affixes that are found under primary stress. These affixes are called *secondary bases* and include prebases, prewords, prephrases, postbases, postwords, postphrases, designative affixes, afterbases, and non-derivational affixes.

> A *BASE* IS ANY MORPHEME WHICH MAY OCCUR UNDER PRIMARY STRESS. *PRIMARY BASES* OCCUR ONLY IN THE CENTRAL POSITION; *SECONDARY BASES* OCCUR ONLY IN THE BEFORE- AND AFTER-POSITIONS.

7.7 *Prebases*. Prebases are before-position morphemes. They always contain only one vowel nucleus, simple or complex, and, in addition, some contain a single consonant morphophone. They may bear any degree of phonemic stress except secondary (/^/). They may *only* occur with bound primary bases, never with free primary bases, and they must always occur immediately before the bound primary base. The commonest prebases -- they are few in number -- are:

√e.y.-	átheĭst
√iy.-	èject
√æ.(b.)-	ábstràct, àscĕrtáin
√æ.(d.)-	àdhére, àccépt
√a.(b.)-	óbjèct, óccŭpỳ
√s.iy.-	seclúde
√e.(n.)-	émphăsis, énĕrgỳ

In the above list, morphophones which are placed in parentheses are sometimes present in the form given, while at other times they are replaced by other morphophones, depending upon what the initial morphophone of the primary base is. So, for example, the prebase √e.(n.)- occurs in that form before all primary bases except those which begin with the morphophones b., p., f., or m., all labials in which case it assumes the form √e.m.-: embolism, empathy, emphasis, emerge, but enter, energy, enthusiasm.

Notice that all the primary bases involved in the above examples are bound forms: √0.iy.-, √-ǰ.e.k.t.-, √s.t.r.æ.k.t., √-s.e.r.t.-, √-h.iy.r., √-s.e.p.t., √-k.y.uw.p.-, √k.l.uw.d., √f.æ.s.i.s., √-e.r.g.-. Try to think of before-position morphemes that can come between these prebases and the primary bases -- you will find that there are none, for prebases always occur immediately before the primary base. Notice, too, that the prebases in the above examples show every degree of phonemic stress except secondary (/^/).

7.8. Prewords.- Prewords are also before-position morphemes. Like prebases they contain a vowel nucleus. Unlike prebases, however, there may be more than one vowel nucleus, simple or complex, and they generally have more than one consonant morphophone. They may bear any degree of phonemic stress including secondary (/^/); they may occur with either free or bound primary bases. The commonest prewords are:

√d.iy.-	dĕpóse, dĕstróy
√k.a.(m.)-	cŏmpóse, cóntàct
√s.ə.(b.)-	súbwày, sŭccúmb
√m.i.s.-	mĭstáke, míshàp
√r.iy.-	rê-máke, rĕplý
√e.(k.s.)-	éxpòrt, ĕxpénd
√p.r.iy.-	prévìew, prĕclúde
√p.ow.s.t.-	pôst-dáte, pōstpóne
√p.r.ow.-	próvèrb, prŏtéct
√d.i.s.-	dĭspláy, dĭstúrb
√p.e.r.-	pĕrfórm, pérfĕct
√i.(n.)1-	ĭnsáne, ĭllógĭcăl (meaning not)
√i.(n.)2-	ĭnfórm, ĭnstrúct, írrĭgàte (meaning in, into)

Notice, in the examples above, that the first example in each pair shows the preword with a free primary base, while the second example in each pairshows the same preword occuring with a bound primary base. You can also see that prewords may bear any degree of phonemic stress, including secondary. There are many other prewords. Among them are: √day^1- (*diode*), √d.ay.^{2}- (*digress*), √m.a.n.ow.- (*monotheistic*), √b.ay.- (*bicycle*), √æ. n.t.ay.- (*anti-social*), √æ. n.t.iy.- (*anteroom*), √k.æ.t.æ.- (*catalyst*), √h.ow.m.ow.- (*homogenize*), √k.a.n.t.r.ə.- (*contravene*), √p.a.l.iy.- (*polygyny*), √i.n.t.e.r.- (*intervene*), √n.a.n.- (*nonsense*), √t.r.æ. n.z.- (*transfer*), √s.i.r.k.u.m.- (*circum-navigate*), √ə.n.- (unkind), √b.iy.- (*believe*), √s.i.n.- (*synthetic*), √h.ay.p.r.- (*hyper-sensitive*), √h.ay.p.ow.- (*hypodermic*), √t.r.ay.- (*tricycle*), √f.o.r.^{1}- (*forget*), √f.o.r.^{2}- (*foresight*) √i.n.t.r.a.- (*intra-mural*), √æ. m.b.iy.- (*ambidextrous*), √æ. m.f.iy.- (*amphibian*), √aw.t.ow.- (*automobile*), √b.e.n.e.- (*beneficient*), √e.p.iy.- (*epidermis*), and many others -- largely of Greek origin.

7.9. *Prephrases*. Prephrases consist of a combination of: (1) two prewords, (2) three prewords, (3) a preword and a prebase, or (4) two prewords and a prebase -- all coming immediately before a free or bound primary base. Forms containing three prewords and forms containing two prewords and a prebase are extremely uncommon and therefore sound extremely artificial. Examples are: *re-excommunicate* (three prewords), *hyper-misapply* (two prewords and a prebase).

In combining two prewords there is no specific order in which they must come. For example, in the word *re-explain* the preword √e.(k.s.)- is second in the two-preword series, while in the word *excommunicate* it is first in the series. It is nevertheless true that each combination tends to recur with many primary bases. For example, *re-ex-* occurs not only in the word *re-explain* but also in the words *re-examination*, *re-excavate*, *re-exchange*, *re-exercise*, *re-experiemant*, and many others.

If, however, a preword and a prebase come together to form a prephrase, the preword must always be first, and the prebase must always be second, coming immediately next to the primary base, as in *re-occupy*, or *de-emphasize*. It should be added that one cannot, of course, have a prephrase which consists of two or more prebases, since one of the requirements in the definition of that morphemic class is that it must always come *immediately* before the primary base. It is obviously impossible for two prebases *both* to come *immediately* before the primary base in the same word.

7.10. *Prefixes*. There is one final type of before-position morpheme. This is referred to as the prefix. A prefix never contains a vowel morphophone. A prefix consists only of one or two consonant morphophones. Prefixes are stresseless, as most English consonants are when they occur as morphemes. Finally, prefixes may occur only with kernel vocalics. Examples of prefixes are:

√h.-	here, hence, hither
√đ.-	the, there, then, this
√n.-	none, never, nor, neither
√m.-	me, my, mine
√w.-	where, whence, whither, when

As can be seen from the above examples, prefixes occur with a relatively small number of kernel vocalics. These usually may take a variety of prefixes. For example, the kernel vocalic √-e.- of -ence (the √-n.s. is an after-position morpheme) may take the prefix √h.- (hence), the prefix √đ.- (thence), or the prefix √w.- (whence). Prefixes never occur in pairs, nor do they occur in combination with prewords or prebases to form prephrases.

EXERCISES

A. In the following words: (1) identify the prebase(s), (2) give the phonemic spelling in the word used here, (3) give the morphophonic spelling, (4) tell whether the before-position morpheme is a prebase or a preword.

1. separate
2. ascertain
3. exit
4. reconvene
5. subcontinent
6. redefine
7. ambidextrous
8. discombobulate
9. occlusion
10. perspicacious

B. Attach as many different prebases, prewords, and prephrases as you can think of to the following primary bases. Try to use ones not in the lists in this section.

1. -velop
2. -spect
3. -thetic

4. -pose
5. -ply
6. -struct
7. -fer(e)
8. -tain
9. -gress
10. -clude

The After-Position Morphemes

7.11. Derivation and Designation. All other morpheme types listed in section 7.3. are after- position morphemes, with the exception of the superfix and suprafix morphemes, which are above-position morphemes.

All after-position morphemes except the non-derivational affixes are morphemic markers; that is, when they are added to primary bases they either designate the entire resulting form as a particular part of speech or they derive one part of speech from another one. For example, the bound primary base √l.o.g.- (log-) is in itself not a part of speech, but when we add the after-position morpheme √y.k. (-ic) to it -- logic -- the full form is designated as a noun. In a similar manner the free primary base √b.oy. (boy) is in itself a noun, but if we add the after-position morpheme √-i.š. (-ish) to it -- boyish -- we have derived an adjective from the noun boy. Of basic importance in this distinction between designating and deriving is the concept of free-versus-bound.

AN AFTER-POSITION MORPHEME ADDED TO A FREE FORM (ONE WHICH OCCURS IN ACTUAL SPEECH) WILL DERIVE A PART OF SPEECH AND THEREBY CREATE A NEW FORM. AN AFTER-POSITION MORPHEME ADDED TO A BOUND FORM (ONE WHICH DOES NOT OCCUR BY ITSELF IN ACTUAL SPEECH) WILL DESIGNATE THAT FORM AS A PARTICULAR PART OF SPEECH AND WILL NOT CREATE A NEW FORM.

7.12. Postbases. Postbases always derive parts of speech. They never designate parts of speech. This means that postbases are only added to free forms, never to bound forms. Postbases contain a single vowel nucleus, simple or complex. They also contain one or more consonant morphophones. The vowel nucleus may bear primary stress (/ˊ/) or any degree of phonemic stress except secondary (/ˆ/). As you can see, there is a certain similarity between prebases and postbases. Morphophonically they consist of the same things: a single vowel nucleus plus consonant morphophones, the vowel nucleus being capable of occurring under any degree of phonemic stress except secondary. The major difference between the two morpheme types is, of course, that prebases occur only in the before-position, while postbases occur only in the after-position. Another difference is that postbases may be added only to free material, while prebases may be added only to bound material.

Postbases may derive nouns and adjectives from verbs, nouns from nouns, verbs from adjectives, or adjectives from nouns. The commonest postbases are:

Noun Indicators

√-m.e.n.t.	dĕpártmĕnt (deriving a noun from a verb)
√-o.r.[1]	áctŏr (deriving a noun from a verb), fáctŏr (deriving a noun from a noun)
√-i.s.t.[1]	cómmŭnĭst (deriving a noun from a noun)

Adjective Indicators

√æ.n.[1]	Rómăn (deriving an adjective from a noun)
√-i.t.	défĭnĭte (deriving an adjective from a verb)
√-i.v.	áctĭve (deriving an adjective from a verb)
√-y.k.[1]	linguístĭc (deriving an adjective from a noun)
√-æ.l.[1]	cŏmpàrtméntăl (deriving an adjective from a noun)

Verb Indicators

√ay.z.	cŏmpàrtméntălize (deriving a verb from an adjective)

Although none of the examples above show the postbases under primary stress, they all may occur with that degree of stress. Examples built on the words above are: departméntal, factórial, communístic, Romántic, definítion, actívity, linguistícian, compartmentálity (the phonemic /-iš-/ of "definition" and "linguistician" are phonemic forms of the postbases √-i.t. and √-y.k. respectively). This ability, as it were, of postbases to take primary stress is one of their distinguishing characteristics.

Notice, too, that each of the examples above is a free form -- a full word, if we may call it that for the time being -- when the postbase is removed: *depart*, *act*, *fact*, *commun*, *define*, *act*, *linguist*.

In the examples on the previous page the superscript ^{1} indicates that there are other morphemes with this same morphophonic shape, in just the same way that we referred to √-z.^{1}, √-z.^{2}, and √-z.^{3}, the plural, possessive, and 3rd person singular present tense verb markers as three separate morphemes, even though they had the same morphophonic shape. Finally, the fact that we have used the morphophonic spelling √*y*.k. rather than √-*i*.k. for what is usually spelled -*ic* in the regular spelling system, will be explained in some detail later in the unit. For the present just accept this morphophonic spelling.

7.13. *Designative Affixes.* Designative affixes -- as the name indicates -- always *designate* parts of speech. They *never* derive parts of speech. This means that they are added only to bound forms, never to free forms. Designative affixes, like postbases, contain a single vowel nucleus, simple or complex, and one or more consonant morphophones. They, too may bear primary stress (/ˊ/) or any other degree of phonemic stress *except* secondary (/ˆ/). They are particularly characterized by their *ability* to occur under primary stress. In essence, the only difference between postbases and designative affixes is the fact that the designative affixes are added to bound material, while the postbases are added to free material.

Designative affixes will designate forms as *verbs*, *nouns* or *adjectives*. The commonest designative affixes are:

Noun Indicators

√-y.k.^{2}	*lógĭc*	√æ.k.	*maniac*
√-æ.l.^{2}	*príncĭpăl*		
√-i.s.t.^{2}	*línguĭst*		
√-æ.n.^{2}	*Chrístiăn*		

Adjective Indicators

√-ay.t.	*cŏntríte*
√-æ.r.	*pĕcúliăr*

Verb Indicators

√-ay.z.^{2}	*băptíze*	√ay.	*clarify*

Examples built on the above which show these designative affixes under primary stress are: *logícian*, *principálity*, *linguístic*, *Christiánity*, *contrítion*, *peculiárity* (the phonemic /-iš-/ of "logician" and "contrition" are phonemic forms of the designative affixes √-y.k. and √-ay.t. respectively).

Notice that none of the examples above is a free form -- a full word -- when the designative affix is removed: log-, princip-, lingu-, Christi-, contr-, and peculi- .

7.14. Postwords. Postwords may be defined in exactly the same way as designative affixes, except that they may -- and often do -- occur under phonemic secondary stress (/^/). For convenience sake they may even be thought of as designative affixes which may occur under secondary stress. Postwords designate forms as verbs, nouns, or adjectives. Among the commonest postwords are:

Verb Indicators

√-ey.t.[1]	ăppréciâte

Noun Indicators

√-ey.	éntrêe, cŏmmúnĭquê

Adjective Indicators

√-ay.l.	frágîle
√-ay.n.	clàndéstîne, dĭvíne

In any of these examples tertiary stress (/`/) might be used. With √-ey. primary stress may occur. These forms may also be built upon to show that the postwords may occur under primary stress: appreciátion, entrée (without any additional after-position form), fragílity, divínity (the phonemic /-eyš-/ of "appreciation" is a phonemic form of the postword √-ey.t.).

As you can see, postwords are added only to bound forms: appreci-, entr-, communiq-, frag-, clandest- , div-.

7.15. Designative and Derivative Afterbases. Afterbases either designate or derive parts of speech and are, therefore, added to either free or bound forms. They also contain a single vowel nucleus, simple or complex, and one or more consonant morphophones. Unlike any of the other after-position morpheme types, however, afterbases always bear primary stress. They never occur under secondary, tertiary, or weak. They designate or derive verbs, adjectives, or nouns. The commonest afterbases are:

Verb Indicators

√-é.s.	convalésce

Adjective Indicators

√-ê.r.^{1}	dòctrĭnnáire
√-ey.t.^{2}	sĕdáte
√-é.s.k.	bŭrlésque
√-íy.k.^{1}	ŏblíque

Noun Indicators

√-é.t.	kìtchĕnétte
√-é.r.^{2}	lègĭonnáire
√-íy.^{1}	dràftée
√-í.r.	âuctĭonéer
√-íy.z.	Chìnése
√-ə.r.	cònnŏisséur
√-é.l.	băgătélle
√-íy.k.^{2}	critíque

Notice that some of the forms to which the afterbases are added in the above examples are free forms and others are bound. The bound forms are: conval-, sed-, burl-, obl-, Chin-, connoiss-, bagat-, crit-,; while the free forms are: doctrin(e), kitchen, legion, draft, auction. You may have noticed that the only derivative afterbases are √-è.r.^{1}, √-é.r.^{2}, √-í.r., √-é.t., and √-íy. The others are all designative.

7.16. Derivational Subbases. Derivational subbases -- as the name implies -- always derive parts of speech. This means that they are added only to free forms, never to bound. Derivational subbases generally do not contain a vowel nucleus, though a few of them do. Usually they consist of one of more consonant morphophones alone. They occur only under weak s (/˘/). They derive adjectives, nouns, verbs, and adverbs from adjectives; nouns, verbs, and adjectives from nouns; nouns from verbs; and adverbs and nouns from adverbs. The commonest derivational subbases are:

Noun Indicators

√-s.t.r.	gángstĕr (deriving a noun from a noun)
√- n.s.	góodnĕss (deriving a noun from an adjective)
√-r.	wórkĕr (deriving a noun from a noun)
√-j.	bréakăge (deriving a noun from a verb)
√-i.z.m.	cómmŭnĭsm (deriving a noun from a noun)
√-y.uw.l.^{1}	nódŭle (deriving a noun from a noun)
√-iy.^{2}	beauty

Verb Indicators

√-n.^{1}	léngthĕn (deriving a verb from a noun)

Adjective Indicators

√-iy.^{3}	gréasy̆ (deriving an adjective from a noun)
√-l.iy.^{1}	kíndly̆ (deriving an adjective from an adjective)
√-š.^{1}	bóyĭsh (deriving an adjective from a noun)
√-f.u.l.	beáutĭfŭl (deriving an adjective from a noun)
√-y.s.	spácioŭs (phonemically the √-y.s. is /-ɨs/) (deriving an adjective from a noun)

Adverb Indicators

√-l.iy.^{2}	fréely̆ (deriving an adverb from an adjective)

All the forms to which these derivational subbases are added are free forms: gang, good, work, break, commun, length, grease, kind, boy, beauty. Notice, too, that the derivational subbases are always under weak stress, never any other degree of phonemic stress.

7.17. Designative Subbases. Designative subbases follow the same definition as derivative subbases, except for the fact that the designative subbases are added only to bound forms, never to free. They designate the completed forms as nouns or verbs. Some of the commonest designative subbases are:

Noun Indicators

√-θ.	breath
√-t.	act
√-s.	Romance (√r.ow.m. & √æ.n.t. & √s.)
√-iy.^{4}	probability
√-i.d.	peptide
√-y.uw.l.^{2}	particle (the √y.uw.l. appears as /-ɨl/)
√-y.uw.r.	verdure
√-y.n.	nation (phonemically this is usually /-ɨn/)
√-r.^{2}	furrier
√-ey.t.^{2}	graduate

Verb Indicators

√-ð.	breathe
√-š.^{2}	establish

All the forms to which these designative subbases are added are bound forms: brea-, ac-, Roman(t)-, beaut-, pept-, partic-, verd-, nat-, establ-. The designative subbases, like derivational subbases, occur only under weak stress.

7.18. Non-derivational Affixes. Non-derivational affixes, abbreviated nda, are after-position morphemes. They contain a single vowel nucleus, simple of complex, and may in addition contain one or more consonant morphophones. They may occur under any degree of phonemic stress, including primary. Unlike the other after-position morphemes, they neither derive nor designate completed forms as particular parts of speech. You will remember that derivative after-position morphemes occur only with free forms, while designative after-position morphemes occur only with bound forms. The nda's, being neither derivative or designative, may occur with either free or bound forms. In either instance, however, they create new bound forms. Nda's, that is, will never be the final morpheme in a word. Since in shape and sound some of them are like postbases, this provides a handy way to distinguish them from postbases. In logic, for example, the -ic is a postbase, since the word ends with that morpheme. In particle, however the -ic- is an nda, since there is no word in English such as partic.

These morphemes are quite important in word-building in English. They are base extenders. That is, they make it possible to add other after-position morpheme types which a particular base would normally not be able to take. By placing an nda between the base that we wish to form a new word from and the after-position morpheme we wish to add, the new word may be formed. There are two essential types of base extension, and these will be discussed in turn below.

The first function of the nda's is as a base extender with free forms. As you have learned, it is not possible to add designative after-position morphemes to free forms; they can be added only to bound forms. Suppose, however, that we wish to take the free form peculiar, which is an adjective, and make a noun from it by using the designative subbase √-iy.^{4} , the resulting form will be a bound form. In this case we will use the nda √-y.t. , spelled in normal orthography -it, and will have the form peculiarit-. Peculiarit- does not exist as a free form in English; it is a bound form. Since it is a bound form, we may now add the designative subbase √-iy.^{4} to it, giving us the final word peculiarity. In this way the use of nda's makes it possible to attach designative after-position morphemes to free material. This, incidentally, enables us to create a much larger total vocabulary than would be possible if we had to operate solely under the restrictions of derivative and designative after-position morphemes.

The second function of the nda's is as a base extender with bound forms. The post words √ey.t.^{1}; the designative affixes √æ.n.^{2} , √æ.r., √y.k.^{2}, √ay., √æ.k., and √æ.l. ; and the designative subbases √r.^{2} and /iy.^{4} cannot be added directly to bound forms. Instead the bound base itself must first be extended by the use of an nda -- then the designative after-position morpheme may be added. Usually the nda's used to make such a base extension are √y.y., √y.uw. or one of the nda's which contain the morphophone i. or y. as their initial morphophone and a single consonant as the second morphophone (see the first ten morphemes in the list below). An example is the completed free form litigate, which consists of the bound primary base √l.i.t.-, the nda √i.g., and the postword √ey.t.[1] One cannot directly add √ey.t.[1] to the bound primary base √l.i.t.-. The base must first be extended by the addition of the i.-containing nda √i.g.

The commonest nda's are those listed below:

√-y.t.	probability
√-y.n.[2]	discriminate
√-y.m.	legitimate
√-y.b.	horrible
√-y.y.	editorial
√-y.uw.	graduate
√-y.d.	prosidy
√-i.f.	identify
√-i.g.	investigate
√-i.k.	particle
√-æ.	parallel
√-e.t.	theoretical
√-e.r.	wilderness
√-æ.k.[2]	spectacular
√-o.r.	history
√-e.n.	torrent
√-æ.n.t.	romantic

For the moment disregard the spellings with the morphophone y. (as in √-y.y. above). These will phonemically sound like /i/. The reason for sometimes indicating it as morphophone i. and sometimes as morphophone y. will be discussed in detail later in the unit.

From the examples above you can see that nda's occur only with a following designative after-position morpheme (designative affix, postword, or designative subbase) -- never with any other type of after-position morpheme.

7.19. Postphrases. Any combination of an nda and a following designative after-position morpheme will be called a postphrase. These postphrases are extremely common, and they recur with high frequency in English words. There are in addition other combinations of two after-position morphemes which -- though one member is not an nda -- also occur very frequently in English words. These, too, are postphrases. Below is a list of the commonest postphrases of the two varieties:

I. Postphrases consisting of an nda and a designative after-position morpheme

√y.y. & √æ.k.^{1}	maniac (nda & desig. affix)
√y.y. & √ey.t.^{1}	deviate (nda & postword)
√y.y. & √æ.r.	peculiar (nda & desig. affix)
√y.y. & √æ.n.	Christian (nda & desig. affix)
√y.y. & √ r.^{2}	furrier (nda & desig. subbase)
√y.uw. & √ey.t.^{1}	graduate (nda & postword)
√y.t. & √iy.^{4}	identity (nda & desig. subbase)
√i.f. & √ay.	clarify (nda & desig. affix)
√i.f. & √y.k.^{2}	terrific (nda & desig. affix)
√i.k. & √ey.t.^{1}	communicate (nda & postword)

II. Postphrases consisting of various combinations of after-position morphemes and not containing an nda:

√i.s.t.^{2} & √y.k.^{1}	linguistic (desig. affix & postbase)
√æ.l.^{2} & √l.iy.^{2}	principally (desig. affix & deriv. subbase)
√iy.^{2} & √f.u.l.	beautiful (deriv. subbase & deriv. subbase)
√m.e.n.t. & √æ.l.^{1}	departmental (postbase & postbase)
√ey.t.^{2} & √y.n.	temptation (afterbase & desig. subbase)

Postphrases occur as "packages" and are attached as units to larger forms to create new forms.

7.20. Postfixes. Postfixes are after-position morphemes which consist, like prefixes, solely of one or two consonant morphophones. Postfixes never contain a vowel morphophone. Like prefixes, they are stressless, as most English consonants are when they occur as morphemes. Finally, postfixes occur only with kernel vocalics.

Examples of postfixes are:

√-t.	it
√-m.	him, whom
√-r.^{3}	her
√-s.^{2}	us
√-n.^{2}	mine

Postfixes, like prefixes, occur with a relatively small number of kernel vocalics, though they are used with great frequency in actual speech, since they involve some of the highest frequency words in the language.

7.21. Suffixes. Suffixes also fill the after-position. They occur only with free forms, and they consist solely of one or two consonant morphophones, with the exception of the suffix √ĭ.ŋ. . They may never bear more than weak stress, and -- unlike all other after-position morpheme types which are added to free material -- they are designative morphemes. In addition they are always the last morpheme in a word. There may be only two suffixes in a single free word.

The suffixes are:

NOUN INDICATORS

√z¹ (/-s/, /-z/, /ɨ̆z/)	bóys, hóuses, gífts, cŏntáinĕrs, béautĭfíĕrs (ALSO INDICATES PLURALITY)
√z² (/-s/, /-z/, /-ɨ̆z/)	bóy's, hóusĕ's, gíft's, cŏntáinĕr's, béautĭfíĕr's, bóys', hóusĕs', gífts', cŏntáinĕrs', béautĭfíĕrs' (ALSO INDICATES POSSESSION, IN SINGULAR OR PLURAL)

ADJECTIVE INDICATORS

√r.⁴ (/-ɨ̆r/)	míldĕr, gréenĕr (ALSO INDICATES COMPARATIVE)
√s.t. (/-ɨ̆st/)	míldĕst, gréenĕst (ALSO INDICATES SUPERLATIVE)

VERB INDICATORS

√z³ (/-s/,/-z/,/-ɨz/	he líves, she mákes, he míssĕs (ALSO INDICATES THIRD PERSON, PRESENT TIME)
√D¹ (/-d/, /-t/, /-ɨ̆d/)	he líved, we slépt, he ència ódĕd (ALSO INDICATES PAST TIME)
√D² (/-d/, /-t/, /-ɨ̆d/)	he has líved, we have slépt, he has èncódĕd (ALSO INDICATES COMPLETED ACTION)
√iŋ	she was síngĭng (ALSO INDICATES CONTINUED ACTION)

Notice that each suffix indicating a noun can only be attached to a word that is already considered a noun because of its use or because it contains a noun-deriving or noun-designating morpheme, as the word cŏntáinĕr. The adjective suffixes may be attached only to words that are already considered adjectives because of their use or because they contain adjective-deriving or designating after-position morphemes. For example, manly has the adjective-making postbase -ly̆ attached to it; therefore we know we may say mánlĭĕr or mánlĭĕst. The same is true of the verb suffixes; they *must* be attached to words that are considered verbs already because of their use or because they have verb-deriving or designating morphemes attached to them. For example, *léngthĕn* has the verb-making subbase $\sqrt{n}$.[1] attached to it; therefore we know that we may say *he léngthĕns*, *he léngthĕned*, *he has léngthĕned*, *he is léngthĕnĭng*.

It is possible, as we mentioned earlier, to use as many as two paradigmatic suffixes together. There are only two sets of suffixes, however, which may occur as combinations. The first of these is the noun-plural and noun-possessive combination. In pronunciation it seems, as if only one suffix were present. Actually, when any of the three alternates of $\sqrt{Z}^1$ is present, it is followed by the identical alternate of $\sqrt{Z}^2$. Then the resulting sequence of identical morphophones (-z.z. or -s.s.) is reduced to /z/ or /s/; thus, for example, *bóys'*, *gírls'*, *cáts'*, *hórses'*. Notice that we show this combination of noun-plural and noun-possessive in spelling by the *-s'*. This is an example of true morphemic spelling, since the *-s* stands for the noun-plural suffix, and the *'* stands for the noun-possessive suffix, even though the latter is not present in the pronunciation of the word.

The second possible combination of two paradigmatic suffixes is the continued action suffix $\sqrt{-i\eta}$ and the noun-plural suffix $\sqrt{z}$. This combination occurs only when the word containing the /-iŋ/ is used in the sentence as a noun. For example, *wínnĭngs*, *fíttĭngs*, etc. No other two paradigmatic suffixes may be used together.

Although the paradigmatic suffixes given in the lists above are the ones used in the great majority of cases, there are a few other suffixes. These, however, are relatively rare. They are all relics of more frequently used forms from Middle and Old English.

The $\sqrt{Z}^1$ noun-plural suffix sometimes is not present. In its place the vowel of the noun-base is changed; for example, *míce*, *geése*, *líce*. In some few words the noun-plural suffix is $\sqrt{n}$ (/-ɨn/), with or without an accompanying vowel change of the base; for example, *chíld* (/čáyld/) - *chíldrĕn* (/číldrɨn/), *óx* (/áks/) - *óxĕn* (/áksɨn/). Some foreign words, like *ălúmnŭs*, *ălúmnă*, *dátŭm*, etc., still use their foreign plural forms (generally words from Latin or Greek); for example, *ălúmnì*, *ălúmnàe*, *dátă*.

The same type of special changes also takes place when we wish to indicate past-time or completed-action. Some verbs do not use the $\sqrt{D}^1$ suffix. Instead they use a vowel change in the verb-base; for example, *he rán*, *she swám*, *he has rún*, *they have swúm*. In some few verbs the completed-action suffix is $\sqrt{n}$ (/n/, /-ɨn/), with or without an accompanying vowel change in the base; for example, *I sée* - *I sáw* - *I have séen* , *I chóose* - *I chose* - *I have chósĕn*. In a few cases past-time and completed action are indicated by a vowel change plus the normal $\sqrt{D}^1$ suffix; for example, *I thínk* - *I thóught* - *I have thóught*.

All of these special cases are relatively rare, but they do occur in verbs that are very frequently used. See how many other examples of these exceptions you can think of.

Above-Position Morphemes

7.22. Superfixes. In the discussion of morphophone variants in Unit Six we concentrated our attention primarily on the segmental morphophones. Though the variants of stress and juncture suprasegmental morphophones were listed, no comment was made about them. In this section, however, we will consider the suprasegmentals briefly.

You will notice from Unit Six that we have given only two stress morphophones, symbolized as ´· and ˘· . Morphophone ´· has as its variants phonemic /´/, /^/, and /`/. To distinguish morphophonic primary stress from phonemic primary stress, we will refer to the morphophonic variety as stronger stress. Stronger stress may be actualized in any given word in a specific dialect as phonemic primary (/´/), secondary (/^/), or tertiary (/`/) stress; that is, all stress phonemes except weak stress. Morphophone ˘· has as its variants phonemic /`/ and /˘/. To distinguish morphophonic weak stress from phonemic weak stress, we will refer to the morphophonic variety as weaker stress. Weaker stress may be actualized in any given word in a specific dialect as phonemic tertiary (/`/) or phonemic weak (/˘/).

A superfix morpheme is a combination of any two stress morphophones. Since there are only two stress morphophones, the number of superfix morphemes is, obviously, small. In fact there will be only three possible superfix morphemes. These are: √´· + ˘· , √˘· + ´·, and √´·´·. We may eliminate the possible combination ˘· + ˘· , since every word in English will bear at least one morphophone of stronger stress (´·).

Superfix morphemes are designative morphemes. They designate completed forms as particular parts of speech. In words which consist of before-position morphemes and primary bases (with or without after-position morphemes) the superfix √´· + ˘· designates the completed form as a noun. An example is the word éxpòrt, which consists of the preword √e.k.s.-, the free primary base √p.o.r.t, and the superfix morpheme √´· + ˘· (the phonemic tertiary stress, /`/, over -pòrt is an actualization of morphophone ˘·). The superfix √˘· + ´· designates the completed form as a verb; for example, èxpórt. Other uses of the superfix morphemes will be discussed as we come to examples of their use.

7.23. Suprafixes. Suprafixes are also above-position morphemes. They consist of morphophones of pitch. All the phonemes of pitch are also morphophones, so that we have morphophonic pitch 4 (4.), morphophonic pitch 3 (3.), morphophonic pitch 2 (2.), and morphophonic pitch 1 (1.). The exact nature and workings of the suprafix morphemes have not yet been worked out by linguists, and, although certain tentative statements could be made, we will not delve further into this area of English morphemics.

Etymology and Romance-derived Forms

7.24. The Value of Etymological Study. The field of etymology is probably one area of language study that all students have at least been partially exposed to. This is the study of the origin of words. In English this is primarily a matter of learning whether a word is of native Germanic English origin or whether it comes from Latin through Norman French. There are, of course, English words with other origins, too, such as those which entered English directly from Medieval Latin, those which came from Greek through Latin, those from American Indian languages and other sources. Our major stock of morphemes, however, comes from Latin via Norman French and from native Germanic sources. This you know both from the material presented in Unit Two on the history of English and from your work on earlier grade levels in English. This unique two-way origin of the stock of English morphemes is of considerable importance, for it means that English not only utilizes Germanic morphemic patterns but also Romance (Latin and its decendant related languages) morphemic patterns. It is certainly not true, as some of you may have been taught, that English is really a Romance language. It is a language which is solidly Germanic in phonemic and morphophonic detail. In syntax, too, it is largely Germanic. It is solely in the area of morphemics -- and, therefore, word stock -- that is partakes of certain patterns which are more typical of Norman French and the Romance languages in general. It is impossible, however, to understand modern English thoroughly without at least some familiarity with the Romance morpheme patterns which it uses. These will, of course, affect only morphemes of Romance origin. It is the purpose of this section of Unit Seven to discuss the morphemic patterns which affect morphemes which are of Romance origin. For this reason it will often be of great value to you to learn to use the historical information which any good dictionary will give you about each word. In most standard dictionaries, following the spelling and pronunciation of the word, there will be given a brief sentence telling you from what language the word comes. Though browsing through the dictionary is often said to be the sign of true bookworms, in this case it will be very helpful. After a short time you will come to recognize Romance-derived prewords, prebases, primary bases, and after-position morphemes. You will be amply rewarded, particularly when it comes to spelling these forms in standard orthography, for any such efforts that you make.

7.25. *The Morphophone Y. and Romance Alternation Patterns.* In Unit Six we discussed *alternation of morphophones* as a type of sound change. We discussed the vowel alternations of the five basic patterns and briefly said that there were consonant alternations, too. Before going on in this section, you should go back to Unit Six (pp. 11-14) and carefully review the information given there on alternations.

Alternations are actually just a special type of replacement pattern. Replacement patterns are patterns of morphophone change which take place when the meaning of a word is altered through the addition of after-position morphemes -- the addition of suffix /d.^{1}, for example, to the primary base /k.iy.p. (*Keep*), which causes the replacement of the vowel nucleus iy. by e. (*kept*). Alternations are simply Romance language replacement patterns. They are caused when an after-position morpheme containing the morphophone y. is added to another form. The changes that take place in the vowels are not too difficult to learn, but there are also other predictable consonant changes which must be considered. This is what we will do here. The five rules below should, if necessary, be memorized. They may on first sight look rather complex, but, if you apply them carefully to the exercise following this section, you will find them rather simple to use.

RULE 1.

In Romance-derived morphemes *only* morpheme-final t. becomes s. (both written always as *t*), k. becomes s. (both written always as *c*), and d. becomes z. (written as *d* and *s* respectively) before any after-position morpheme which contains the morphophone y. This does not include the morphophone combination y.uw., which acts as a unit morphophone. Exceptions are: when morpheme-final d. is preceded by z., when morpheme-final t. or k. is preceded by s., or when morpheme-final d., t., or k. is preceded by a complex vowel morphophone (*not* phoneme) plus any consonant morphophone. Finally -- morpheme-final morphophone s. becomes z. (both written always as *s*) *only* after morphophone r.

RULE 2.

The following morphophone combinations are pronounced as: (+ indicates that the preceding consonant is morpheme-final, and the y. is morpheme-initial):

s.+y. = /š/ ≈ /sy/
z.+y. = /ž/ ≈ /zy/
d.+y. = /ǰ/ ≈ /dy/
t.+y. = /č/ ≈ /ty/
g.+y. = /ǰ/

This is true when the y. is followed by any morphophonic vowel (including uw.) or by the morphophones m., n., ŋ., l., y., w., and h. Otherwise: s.+y. = /s/, z.+y. = /z/, d.+y. = /d/, t.+y. = /t/, g.+y. = /g/.

RULE 3.

Vowel alternation *of the primary base only*, from complex to simple morphophonic nucleus, in the five patterns discussed in Unit Six, also occurs before any after-position morpheme which contains y. or y.uw. if the y. or y.uw. are followed by stops or affricates.

RULE 4.

All y.-containing and y.uw.-containing after-position morphemes occur with other morpheme types *only* under a superfix morpheme which has ´ on the immediately preceding morphemic segment.

RULE 5.

In morphemes which are native Germanic in origin: s.+y. = /š/, z.+y. = /ž/, d.+y. = /ǰ/, t.+y. = /č/, and g.+y. = /ǰ/ -- *always*.

We will assume that these five rules have thoroughly frightened any linguistic sense you have learned so far completely out of your head! Let us, however, look at several examples in detail, and the workings of these rules will become both apparent, and -- it is to be hoped -- simple.

In the word *nation* (/néyšɨn/) the bound primary base is √n.ey.t.- . It is a Romance-derived base. It is also found in the words *native*, *nativity*, *nature* and other forms. When we add the designative subbase √-y.n. to the bound base √n.ey.t.- Rule 1 is applied. This rule states that morpheme-final t., as in √n.ey.t.- alters to s. before any after-position morpheme containing the morphophone y. Morphophonically, then, *nation* is n.ey.s.y.n. Applying Rule 2, morpheme-final s., as in our altered bound base √n.ey.s.- is phonemically actualized as /š/ when before morphophone y. if morphophone y. is in turn followed by a vowel, semivowel, nasal, or l. Applying Rule 3, the bound base √n.ey.s.- does *not* show vowel alternation from ey. to æ., since the y.-containing after-position morpheme, √-y.n., does not contain a stop or affricate morphophone. This gives us phonemic /neyšɨn/. According to Rule 4 morphophonic stronger stress must be on the bound base √n.ey.s.- , since it immediately precedes the y.-containing after-position morpheme. The final phonemic form, then, is /néyšɨn/.

In the word *nature*, the bound base is still √n.ey.t.-. √-y.uw.r. is, like √-y.n., a designative subbase. Applying Rule 1 we find that morpheme-final t. does *not* alter to s. before an after-position morpheme which begins with the morphophonic unit y.uw. Applying Rule 2, morpheme-final t. plus morphophone y. is phonemically actualized as /č/. Following Rule 3, the nucleus of √n.ey.t.- does *not* alter to æ. , giving us the total form /neyčɨr/. Following Rule 4, morphophonic stronger stress will be found on the morpheme immediately preceding the √-y.uw.r., giving us the final word /néyčɨr/. Notice that in both *nation* and *nature* the letter *t* is used to spell morphophone t. *and* morphophone s., no matter how they are actualized phonemically.

Now let us look at the word righteous (/ráyčɨs/) . The free primary base is √r.ay.t. (*right*). This is a morpheme of native Germanic origin. √y.s. is a derivational subbase. Since, however, √r.ay.t. is a Germanic base, morpheme-final t. does *not* change to s., and, applying Rule 5, morpheme-final t. plus morphophone y. is phonemically actualized as /č/.

7.26. *Homophonous After-position Morpheme Pairs*. If you will look back at our discussion of the various kinds of after-position morphemes you will see that in several instances we have used the morphophone y. to spell what phonemically would be actualized as /i/ or /ɨ/, whereas at other times we have used morphophone i. to indicate the same phonemic actualizations. This is a result of groups of homophonous morphemes, one of which is an nda and the others , types of after-position morphemes. Only five groups of such after-position morphemes are involved. They are:

	NDA	PB	DA	DER.SB	DES.SB
1.	√y.d.				√i.d.
2.	√y.n.^{2}				√y.n.^{1}
3.	√y.t.	√i.t.			
4.	√y.y.			√iy.^{2}, √iy.^{3}	√iy.^{4}
5.	√i.k.	√y.k.^{1}	√y.k.^{2}		

The y.'s have been used whenever the after-position morpheme conforms to the five rules given in the preceding section of this Unit. If none of the changes indicated in those rules take place, then the phonemic /i/ or /ɨ/ sound has been interpreted as morphophone i., since it is only morphophone y. that seems to induce such changes. Examples of the pairs and triplets given above are:

√y.d. (nda) prosidy /prásɨdĭy/
√i.d. (desig. subbase) fetid /fétɨd/

√y.n.^{2} (nda) discriminate /dɨskrímɨnèyt/
√y.n.^{1} (desig. subbase) nation /néyšɨn/

√y.t. (nda) probability /pràbɨbílɨtĭy/
√i.t. (postbase) definite /défɨnɨt/

√y.y. (nda) editorial /èdɨtóriyɨl/
√iy.^{2} (deriv. subbase) beauty /byúwtĭy/
√iy.^{3} (deriv. subbase) breezy /bríyzĭy/
√iy.^{4} (desig. subbase) probability /pràbɨbílɨtĭy/

√i.k. (nda) particle /pártɨkɨl/
√y.k.^{1} (postbase) linguistic /lìŋgwístɨk/
√y.k.^{2} (designative affix) logic /lájɨk/

In the above examples notice that the after-position morphemes spelled morphophonically with y. all conform to Rule 4 --they all "pull" the primary stress of the word to the morpheme or morpheme segment immediately before the y.-containing after-position morpheme, while the forms which have been spelled with morphophone i. do not.

7.27. Two y.-containing After-position Morphemes in the Same Form. It sometimes happens that a word will contain more than one y.-containing after-position morpheme. In this case Rule 4 concerning the placing of morphophonic stronger stress (´) becomes vague. For such occurrences we must modify that rule to state that morphophonic stronger stress comes on the morpheme or morpheme segment which immediately precedes the y.-containing after-position morpheme which is closest to the end of the word. An example would be the word èlectrícity. The primary base, bound, of this word is √e.l.e.k.t.r.-. √-y.k.^{2} is a designative affix. Since it contains morphophone y. the stronger stress of electric falls on the segment of √e.l.e.k.t.r.- which immediately precedes √y.k.^{2}; namely, the syllable -e.k.t.r.-. The √y.t. is an nda. It, too, "pulls" the stronger stress to the morpheme immediately before it; namely, √y.k.^{2}, the k. of which is altered to s. according to Rule 1. It is, then, the last of the two y.-containing after-position morphemes that Rule 4 applies to.

7.28. Romance Replacement Patterns. Romance-derived words show not only the alternations discussed in the pages above, but, too, they show a series of replacement patterns. Review the discussion of replacements in Unit Six before you continue with the material here. Those replacements were primarily concerned with morphemes of native Germanic origin -- ones coming to Modern English from Middle and Old English. There are also certain replacement patterns that occur only with words of Romance origin. These concern the use of the noun-designating subbase √t.. This subbase itself is of Romance origin. When it is added to primary base morphemes which end in g., v., or b., these morphophones become respectively: k., p., p. At the same time the addition of this subbase causes the usual five vowel alternations to take place. Examples are: agent (√ey.g. & √e.n. & √t.) - act (√æ.k. & √t), receive (√r.iy.- & √s.iy.v.) - reception (√r.iy.- & √s.e.p. & √t. & √y.n.), describe (√d.iy. & √s.k.r.ay.b.) - description (√d.iy.- & √s.k.r.i.p. & √t. & √y.n.).

There are several other Romance replacement patterns, but they will not be considered here, since they occur with much less frequency than the above patterns.

Word Types

7.29. Lexical Items and the Principle of Binary Combination. We have so far been talking about word segments or morphemes. Though we have used the term word in our earlier discussions, it has been done without a definition of its precise meaning, and, in truth, it has been rather loosely used. Now that we have talked about all the various morpheme types that are used in English to make free forms, we should go back and explain exactly what we mean when we say "word." We will start by saying that the very term word itself has been given so many various meanings in the past that we will abandon it for a more descriptive one. Our new term will be lexical item.

A LEXICAL ITEM IS THE SMALLEST
UNIT OF FORM THAT CAN BE USED
BY ITSELF AS A FREE FORM. IT
MUST CONTAIN AT LEAST ONE PRIMARY
BASE AND A SUPERFIX MORPHEME.

One should also remember that every superfix morpheme will contain at least one morphophone of strongest stress (´), which will be phonemically actualized as /´/, /^/, or /`/.

From the above definition we can see that all free primary bases are also lexical items. We canalso see that primary bases plus before- and/or after-position morphemes are lexical items, if the total combination is a free form. If, however, a primary base plus before- and/or after-position morphemes is a bound form, then that form is not a lexical item.

A second important point to remember is that morphemes are put together to form lexical items only by two's. This is the principle of binary combination. It says, in essence, that when we create a lexical item such as expendable, we do not put toether all four morphemes at the same time, We do not join the preword √e.k.s.-, the bound primary base √-p.e.n.d., the nda √-æ.b.-, and the designative subbase √-l. simultaneously, Instead, we put together the √e.k.s.- and the √-p.e.n.d. to form one unit. We also put the √-æ.b.- and the √-l. togehter to form a unit. We finally combine the √e.k.s.p.e.n.d. and the √-æ.b.l. to form the final lexical item. We have in each case been combining only two elements at a time, and this procedure is continued until the final lexical item is formed. The principle of binary combination is fundamental to all languages. It is, perhaps, one of a very few language universals.

When we use the principle of binary combination to form lexical items, we do so by forming four basic types of structures. These are called prephrases, postphrases, stems, and strings. You have already studied prephrases and postphrases. You know that a prephrase consists of a combination of prewords and prebases or of prewords alone. You know that a postphrase consists of an nda plus a designative after-position morpheme or of two after-position morphemes regardless of type. In the example of expendable that we used above, the √æ.b.l. was a postphrase. If we had said unexpendable, the √ə.n.e.k.s.- would be a prephrase consisting of two prewords. √e.k.s.p.e.n.d., when used to build a larger free form such as expendable, is a stem. A stem consists of a primary base (free or bound) with or without before- or after-position morphemes attached to it. In the lexical item boyish, √b.oy. is the stem. In the lexical item practical, √p.r.æ.k.t.- is the stem. A string, on the other hand, consists of a postphrase of any of the varieties that you have learned in earlier sections of this unit plus something else. The "something else" may be any type of morpheme except a primary base. An example is the word practicalness. The bound primary base √p.r.æ.k.t.- is the stem; the nda √i.k. and the designative affix √æ.l. for a a postphrase; and the entire bound form √i.k. & √n.s. (a derivative subbase) form a string, consisting of a postphrase and a derivative subbase.

Morphemes combined in binary pairs to form stems, strings, prephrases, and postphrases are then in turn, as we have shown in the examples above, combined by twos to form lexical items. There are three types of lexical items. These will be called: TRUE WORDS, EXPANDED WORDS, and WORD PHRASES. Each of these lexical item types will be defined in the paragraphs below.

7.30. True Words. True words are lexical items which contain one and only one primary base (free or bound) or kernel vocalic. They may also contain suffixes and/or subbases, or, if the central-position is filled by a kernel vocalic, they may contain prefixes and postfixes. In addition they must contain a lexical superfix morpheme in which morphophonic stronger stress is on the primary base or kernel vocalic. They may not contain any other morpheme type. Examples would be: boy (√b.óy.) , consisting of a free primary base; boys (√b.óy. & √z^1), consisting of a free primary base and a suffix; boyish (√b.óy. & √š.), consisting of a free primary base and a derivational subbase; mine (√m. & √áy. & √n.), consisting of a prefix, a kernel vocalic, and a postfix; act (√ǽ.k. & √t.), consisting of a bound primary base and a designative subbase. Lexical items like expend, depart, department, which contain prewords and postbases are not true words, since they contain morpheme types other than those given in our definition above.

7.31. Expanded Words. Expanded words are lexical items which contain one and only one primary base (free or bound). They may also contain suffixes and/or subbases, and they must contain some other before- or after-position morphemes other than suffixes and/or subbases. They will finally contain a lexical superfix morpheme which usually has morphophonic stronger stress on the primary base (exceptions will be discussed in section 7.32.). The lexical items expend, depart, and department, used above, would be examples of expanded words.

7.32. Superfix Morphemes Used with True and Expanded Words. Morphophonic stronger stress (/´/, /ˆ/. /`/) will always fall on the primary base or kernel vocalic in a true word, as stated above. It will also fall on the primary base in expanded words unless:

1. The expanded word contains one or more before-position morphemes and is used as a noun. In such a case the superfix used must have morphophonic stronger stress on the before-position morpheme. If there is more than one before-position morpheme, stronger stress will be on

the preword, or , if there are two prewords, on the second preword. Examples are: éxpòrt, cóndùct, mîscóndùct, nón-ènĕrgy̆.

2. The expanded word contains a y.-containing after-position morpheme. In such cases the superfix used must be one which places morphophonic stronger stress on the morpheme or morpheme segment immediately preceding the y.-containing morpheme. Examples are: cóndùct, but cŏndúctĭon (√k.a.n.- & √d.u.k.t. & √y.n.); èxàmĭnátĭon . Many other examples will be found in section 7.25.-26. of this Unit.

7.33.. Word Phrases. Word phrases are lexical items which must contain two or more primary bases (free or bound). They may contain any other type of morpheme as well, and they must -- like all lexical items -- contain a lexical superfix morpheme. Examples of word phrases are: lighthouse, consisting of two free primary bases, √l.ay.t. and √h.aw.s.; housekeeper, consisting of two free primary bases and a derivative subbase √r.; flashlights, consisting of two free primary bases and the suffix √z.[1].

Morphemic Parts Of Speech

7.34. Identifying Word Classes by Their Morphemic Segments. One of the principal values of the type of segmentation you did in the first half of this unit is that it allows you to identify parts of speech without resorting to abstract definitions. For instance, we may define a noun, as it is traditionally done, as the name of a person, place, or thing. Often, this will work quite well, but sometimes this beomces rather vague. Is philsophy, for example, a thing? If we amend the definition to say "The name of a person, place , thing, or abstract quality ", there is confusion between the definition of a noun and the definition of an adjective. For instance, try to distinguish between the noun beauty and the adjective beautiful, solely by means of definitions. Your attempts may satisfy some people; others will find them vague. If, however, we identify beauty as a noun by its segmentation -- the bound base √byuwt and the subbase of √-iy -- and beautiful as an adjective by its segmentation -- the same as the above except that we add the subbase √f.u.l. -- we have no need to be concerned about definitions. This system also allows for precision in classification.

Let us first use inflectional suffixes for determining parts of speech.

> Nouns may be identified morphemically if they will take $\surd Z^1$ or $\surd Z^2$, that is if they can be inflected for the plural, or the possessive, or both. Any word that can take these inflections is, by this definition, a noun.

Even such words as coming and going, already inflected as verbs, can be additionally inflected with $\surd Z^1$, as in the sentence, His comings and goings were noted. Here they are nouns because the last inflection is nominal. There is a further complication which will be explained later. Sometimes a word, morphemically identified as one part of speech, will be used syntactically as something else. Constructions that have traditionally been called gerunds and infinitives are examples of this. Their exact mode of functioning will be clearly illustrated in a later unit.

> Four inflectional endings serve to identify verbs.

There is the $\surd D^1$, inflection for the past tense, which takes the phonemic shape of /d/, /t/, or /ɨd/, depending on phonological environment. The /t/ follows a voiceless stop or spirant; the /d/ follows a voiced stop or spirant, a nasal or /r/ or /l/, except that following an alveolar stop, /t/ or /d/, it becomes /ɨd/. The $\surd D^2$ inflection takes the same suffix, but it is also preceded by an auxiliary or "helping" verb. You will recall that some verbs, like some plurals, are irregular; that is, they take a ∅ inflectional ending, but they frequently have an internal vowel change. Examples of this are ran, for $\surd D^1$, and has run for $\surd D^2$. There is also the third person singular verbal inflection, $\surd Z^3$, as in he runs, she talks, etc. This morpheme is completely homophonous with $\surd Z^1$ and $\surd Z^2$. It has the same three allomorphs, /s/, /z/ and /ɨz/, dependent on the same phonological conditioning. There is also the verb participle inflection $\surd$ŋ, as in he is running, etc.

> Adjectives can also be identified by their inflection for the comparative and superlative degrees, with the $\surd$r. and $\surd$s.t., as in finer and finest.

Although there is a great deal of irregularity in the pronouns, they constitute a completely inflected class of words. Though nouns have lost all inflection except the possessive and plural, pronouns are still inflected for the nominative case, the objective case, and for the first, second and third person.

	Nominative	Objective	1st Possessive	2nd Possessive
first person	I	me	my	mine
second person	you	you	your	yours
third person	he	him	his	his
	she	her	her	hers
	it	it	its	its
1st person plural	we	us	our	ours
2nd person plural	you	you	your	yours
3rd person plural	they	them	their	theirs
rarely used form	thou	thee	thy	thine

Nouns, verbs, adjectives, and adverbs may also be identified by the presence of specific derivational after-position morphemes. These have been listed earlier in this unit.

In addition to the inflectional suffixes, subbases, and postbases, other types of word segments identify parts of speech. For example, when we examine the kind of words that we previously called structure words, have no primary base but center around a kernel vocalic, we can isolate the prefix √ð , in words like this, that, these, those, there. This can be used as a morphemic indicator for a part of speech that we will call demonstratives.

Demonstratives are words having a kernel vocalic and the prefix √ð .

Them and their meet these conditions, but they have already been identified as pronouns, and the pronominal classification would take precedence over a demonstrative one. The reason for this is that a highly inflected classification is considered to have greater grammatical significance than a less rigidly defined class. Verbs, by this criterion, because they have the greatest amount of inflection, would be the highest ranked part of speech. Nouns would be second. When we have completed our morphemic classification of parts of speech, we will list their order of significance.

We may set up a class of words, which we will call relatives, to include such structure words as who, whom, whose, who's, where, when, whence, why and whether.

The structure words which we will call relatives are determined by the presence of the √w or √hw prefix. In the case of the √w in who and whom, it represents sound changes that have developed from Old English origins.

The two classes which we have just set up, demonstratives and relatives, should also be looked at in terms of their relationship to each other. Many of the words in these two classes present contrasting pairs. Examples of this are the following:

Demonstrative	Relative
there	where
thence	whence
then	when

We may use a simple √h prefix to arrive at a class of words that we call locatives, including such terms as hither, here, and hence.

By examining another group of grequently paired words we may set up two more word classes.

neither	either
nor	or
never	ever

We may then use the √n. prefix to set up a class of words that we call negatives, and their opposing number, lacking this prefix, can be designated as positives. The word not would be included in the negatives, even though it does not have a corresponding positive.

All words that cannot be classified by the presence of inflectional suffixes, derivational postbases or prefixes will be labeled as unclassified, morphemically. Most of these will be classified later by their syntactic usage.

Demonstratives, relatives, locatives, negatives and postives are considered to be based on a sort of pseudo-paradigmatic classification. This means that they seem to be kinds of relic classes that may at one time have formed inflected word class. Only the remnants of such an inflectional system now remain. They are also non-productive; that is, we do not add new words in these categories. If you will think of the many new words constantly entering English vocabulary, you will find that they are mostly nouns or verbs, with occasionally the addition of adjectives or adverbs, usually derived from one of these new nouns or verbs. The inflectional system of nouns and verbs remains productive; that is, we can add the pluralizing suffix, or the tense inflection, to any new word that comes along. Notice, also, that the new words take the regular plural or regular inflection for the past tense. As an example, when the cartoonist Al Capp invented his famous shmoo, he wanted to call the plural shmoon, but the public just would not accept this term. They insisted on the regular, productive plural suffix, and so they became shmoos. Capp was able to retain the term of which he was obviously fond, shmoon, as the name of their place of origin, the Valley of the Shmoon.

We are able to set up a hierarchy of parts of speech based on the amount of productive inflectional machinery in each class. The highest ranking word would then be a verb, because it has the most extensive operational inflectional system. The noun would be the second highest, because it possesses the second greatest amount of inflection. This would be followed by the adjectives and adverbs, classified by the presence of postbases. Adjectives would rank over adverbs because they do have the inflection for the comparative and superlative degrees. From there we proceed to the non-productive structure words. The pronouns would rank the highest, because they are still a complete paradigm, though they are non-productive; you cannot add new pronouns to the language. Below this would come the other structure words whose paradigms have now become rather sketchy. Their rank is determined by the relative fullness of their class. In order of descending importance would be demonstratives, relatives, locatives, negatives and postives.

The following chart lists these morphemic parts of speech, in their order of importance, followed by the symbolization of each that will be used. Remember that there are other important structure words in English, such as prepositions and conjunctions, but these cannot be identified by any morphemic segment; they will have to be identified by their syntactic use.

Abgreviation	Part of Speech	
v	verbs	most highly inflected word class
n	nouns	second most highly inflected word class
adj.	adjectives	some inflection; also identified by postbases.
adv.	adverbs	identified by postbases
pron.	pronouns	complete paradigm, non-productive
d	demonstratives	incomplete paradigm, non-productive
r	relatives	incomplete paradigm, non-productive
l	locatives	incomplete paradigm, non-productive
n	negatives	incomplete paradigm, non-productive
pos.	postives	incomplete paradigm, non-productive
x	morphemically not classifiable	

EXERCISES

PRIMARY BASES

In the following words: (1) identify the primary base, indicating whether it is a free or bound base, (2) give the morphophonic spelling of the primary base.

1. primary
2. punctuation
3. style
4. sensible
5. performance
6. statistic
7. variety
8. conjugate
9. projectile
10. filter
11. segment
12. remaining
13. classes
14. combination
15. basic
16. contentive
17. occur
18. around
19. second
20. weak

KERNEL VOCALICS

Identify the following segments, as they appear, in the following words: prefix, kernel vocalic, postfix, suffix.

1. whose
2. which
3. then
4. when
5. not
6. whom
7. there
8. here
9. these
10. those
11. his
12. mine
13. that
14. me
15. none
16. never
17. them
18. us
19. hence
20. thither

AFTER-POSITION MORPHEME TYPES (Excluding SUFFIXES and NDA'S)

A. In the following words, identify the after-position morpheme types.

1. logicalness
2. impossibility
3. principality
4. desperation
5. beautifully
6. contrastively
7. lengthy
8. truthfulness
9. prosperous
10. gangster
11. position
12. respective
13. primary
14. rigidity
15. morphemic
16. logical
17. actual
18. derivational
19. designative
20. syllabification

AFTER-POSITION MORPHEME TYPES (Excluding Suffixes and NDA's)

B. Attach as many different after-position morphemes of any type as you can think of to the following bases. You may add postphrases as well as varieties of single morphemes.

1. fright-
2. foam-
3. pontif-
4. contend-
5. dream-
6. deleg-
7. black-
8. dark-
9. deep-
10. light-

NON-DERIVATIONAL AFFIXES

In the words below indicate which affixes are non-derivational.

1. primary
2. grammatical
3. impossible
4. specific
5. syllabification
6. vocalic
7. dictionary
8. generally
9. purification
10. ability
11. community
12. spiritual
13. totalitarian
14. situate
15. linguistic
16. mechanical
17. pronunciation
18. piratical
19. paradigmatic
20. simplicity

SUFFIXES

A. In the following words: (1) identify the paradigmatic suffixes, (2) give the phonemic spelling for the word used here, (3) give the morphophonic spelling, (4) indicate the part of speech the suffix shows, (5) indicate the other grammatical point shown by the suffix

1. explaining
2. mice
3. streets
4. he thinks
5. he thought
6. they kept
7. mother's
8. nicer
9. we saw
10. fastest
11. you have managed
12. children
13. she has spoken
14. finishings
15. invited

B. Attach whatever paradigmatic suffixes you can to the following words. Indicate the part of speech the word is and why you added the suffixes you did.

1. believer
2. compensate
3. government
4. slow

SUFFIXES

B.

5. mystify
6. action
7. appreciate
8. modernize
9. kindly
10. crafty

ROMANCE-DERIVED MORPHEMES AND ALTERNATION PATTERNS

For each of the following words (1) look up its derivation in the dictionary, (2) write the word phonemically, (3) write the word morphophonically indicating all the morpheme types present, (4) explain how Rules 1-5 are operating on each word and how their operation leads to the phonemic shape that you have indicated under (2) above. This exercise should be carefully done -- if necessary as homework or over several days time.

1. version
2. profession
3. region
4. digestion
5. recension
6. litigation
7. inspiration
8. fracture (also compare with fragment)
9. reversion

ROMANCE-DERIVED MORPHEMES AND ALTERNATION PATTERNS

10. question

11. promotion

12. division

13. collision

14. mission

15. dictation

16. elocution

17. suspension

18. impulsion

19. action

20. abrasion

LEXICAL ITEMS

Identify each of the following lexical items as: (1) a true word, (2) an expanded word, (3) a word phrase, or (4) not a lexical item. Identify the primary base (free or bound) in each lexical item.

1. undertakers

2. following

3. reject

4. co-articulated

5. hyper-

6. foreground

LEXICAL ITEMS

7. lighthouse-keeper
8. unrecognizable
9. clothed
10. somehow
11. insert
12. payroll
13. Indo-European
14. philosophers
15. overstep
16. -ism
17. numbered
18. Inter-American
19. inanimate
20. sentence
21. re-advertise
22. runner-up
23. higher
24. typewriter
25. disconnecting

STRESS PATTERNS AND LEXICAL SUPERFIX MORPHEMES

Using the same lexical items that were given in the previous exercise, indicate the lexical superfix or stress pattern that is normally used with each item. If that superfix tends to indicate a particular part of speech, indicate which part of speech. The list is:

1. undertakers

STRESS PATTERNS AND LEXICAL SUPERFIX MORPHEMES

2. following
3. reject
4. co-articulated
5. hyper-
6. foreground
7. lighthouse-keeper
8. unrecognizable
9. clothed
10. somehow
11. insert
12. payroll
13. Indo-European
14. philosophers
15. overstep
16. -ism
17. numbered
18. Inter-American
19. inanimate
20. sentence
21. re-advertise
22. runner-up
23. higher
24. typewriter
25. disconnecting

MORPHEMIC PARTS OF SPEECH

Classify the following words according to their parts of speech, determined morphemically. List the part of speech and explain how you determined it, as in the following examples. Remember that some words are not classifiable morphemically.

a. boy - noun - will take the $\sqrt{Z^1}$ plural inflection, boys
b. run - verb - will take the $\sqrt{D^1}$ past tense inflection, ran
c. beautiful - adjective - has the adjectival derivational postbase
d. walk - verb - will take the $\sqrt{D^1}$ past tense inflection, walked
noun - will take the $\sqrt{Z^1}$ plural inflection, walks

1. fine
2. climb
3. ring
4. peculiar
5. peculiarly
6. ringing
7. string
8. ship
9. is
10. flight
11. lovely
12. frightful
13. frightfully
14. fright
15. thence
16. whence
17. never
18. them
19. here
20. there
21. at
22. man
23. manly
24. but

MORPHEMIC PARTS OF SPEECH

25. manfully
26. rightly
27. and
28. cause
29. of
30. determine

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